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THE UNIVERSITY OF ALBERTA

A BIBLIOGRAPHIC SURVEY OF PROFESSIONAL LITERATURE
ON THREE SELECTED METHODS OF
TEACHING SOCIAL STUDIES

by

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A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled "A Bibliographic Survey of Professional Literature on Three Selected Methods of Teaching Social Studies," submitted by Michael Senych in partial fulfillment of the requirements for the degree of Master of Education.

ABSTRACT

This study examined and analyzed literature on three methods of teaching social studies with the view of ascertaining from the literature perused the method most effective in the teaching of social studies. The three were the lecture method, the unit method, and the problems approach method. To determine the efficacy of the methods, answers to four questions were sought:

1. Of what value are each of the methods in developing attitudes, in acquiring understandings, concepts and facts, and in developing skills, abilities, and habits?

2. What are the basic psychological and philosophical principles and assumptions underlying each of the methods?

3. What are the distinguishing characteristics of each method, and are these characteristics responsible for the effectiveness of the method?

4. What evidence does research offer in support of the efficacy of each of the methods?

Information and data were gathered through the perusal of professional literature: books on teaching in general, books on teaching social studies, numerous articles in periodicals, yearbooks published by the N.C.S.S. and N.S.S.E., theses, and reports of experiments conducted in methodology of social studies.

The survey of professional literature indicated that no one particular method was most efficacious in social studies instruction. Whereas a method may be quite effective in attaining some objectives or kinds of learning, it may fail badly in attaining others.

The lecture method appears to be most effective in the acquisition of information, the unit method in providing opportunities to develop democratic and socializing skills and habits, and the problems approach method in developing the scientific method of inquiry for social problems.

To provide for all the skills, understandings, habits, attitudes and knowledge, it is necessary to utilize all methods. No one method can meet all the objectives of education and social studies and provide for all the needs of the learners.

Of the three methods studied, the unit method, being eclectic in approach and being able to utilize all methods and all kinds of pupil activity within its framework, appears to have the scope and flexibility to provide for most types of learning.

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CHAPTER I

THE NATURE AND IMPORTANCE OF THE PROBLEM

I. INTRODUCTION TO THE PROBLEM

In the normal course of events, the children of today will be the adults of tomorrow. To aid them in the transition, the school has a key role. Not only must it provide experiences which will assist them to be good citizens today, but it also must provide experiences which will help prepare them for effective citizenship in the future. Further, it must provide a training and an education which will enable them to meet successfully most problems of life.

The area of the school curriculum which particularly concerns itself with providing such experiences and training is social studies.

The social studies are concerned with people and their interaction with their social and physical environment; they deal with human relationships. In the social studies, attention is given to all ways of living and working together, use of the environment to meet basic human needs, customs, institutions, values, and life situations - the cultural heritage and its dynamic on-going characteristics. . . . The social studies make rich contributions to the growth and development of children because the central function of social studies is identical with the central purpose of education - the development of democratic citizenship.¹

¹John U. Michaelis, Social Studies for Children in a Democracy, (Englewood Cliffs, N.J.: Prentice Hall, Inc., 1956), pp. 2-3.

Moffatt held the same view on the purpose and value of social studies. He stated that

the social studies field is that area which aids youth through sound knowledge, information, and the functional experiences which are essential to the building of basic values, desirable habits, accepted attitudes, and worthwhile skills basic to effective citizenship.²

Consequently, the importance of the social studies program cannot be underestimated. With society ever-changing and with our democratic way of life being threatened by totalitarian concepts, views, and forces, social studies are assuming more and greater importance. Individuals have to learn to be analytical and critical. Branom stated that

The social studies play a very important part in the transmission of our cultural heritage and in preparing pupils to meet unflinchingly the issues in this changing world. Anyone who cannot adapt himself to the changes which are taking place from time to time is at a great disadvantage.

.

If correctly taught the social studies help the individual to adjust himself to his group and to the community at large.³

²Maurice P. Moffatt, Social Studies Instruction, (New York: Prentice Hall Inc., 1955), p. 12.

³Frederick K. Branom, The Teaching of Social Studies in a Changing World, (New York: W. H. Sadlier Inc., 1942), pp. 8-9.

II. STATEMENT OF THE PROBLEM

With the social studies playing such a key role in preparing the students for living in his society, the role of the teacher of social studies assumes great importance. His task is not an easy one. One of his greatest concerns is the problem of deciding what method, or methods, to use in accomplishing the aims and purposes of social studies.

The purpose of this study was to examine critically several methods of teaching, the lecture method, the unit method, and the problems approach method, to determine which is most efficacious in social studies instruction. This critical analysis was done through a survey of professional literature. Opinions and viewpoints of authorities in the field and experimental findings formed the basis of the analysis and evaluation.

The survey of professional literature tried to find answers to the following questions:

1. Of what value are each of the methods in developing attitudes, in acquiring concepts, understandings and facts, and in developing skills, abilities, and habits?

2. What are the basic psychological and philosophical principles and assumptions underlying each of the methods?

3. What are the distinguishing characteristics of each method, and are these characteristics responsible for the effectiveness of the method?

4. What evidence does research offer in support of the efficacy of each of the methods?

5. As ascertained through the survey of literature, which method is most effective in meeting the objectives of social studies?

III. IMPORTANCE OF THE STUDY

Knowledge of methods of teaching is essential to a teacher.

To be effective, he must be critical of his own methods and procedures. He must take stock of himself and see where he has failed to meet the objectives of general education and of social studies. When he has done this, he should select a method, or methods, in the light of objectives, materials of instruction, ability of pupils, type of grouping, and other such criteria.

However, to select and then to utilize a method most effectively, a teacher should understand it thoroughly. Thus there is need for data and information concerning the method. Teachers should find it valuable to examine

critically the method and to understand all its phases, its origin and development as well as its psychological and philosophical base. An insight into the background of the method will result in greater understanding and appreciation on the part of the teachers.

Furthermore,

A study of method . . . should give the student increased power to select and to use procedures most likely to bring about the ends that are sought. That is, the student as a result of his study should grow in his ability to modify and adapt his attack upon a given problem in keeping with the specific objectives in view and in line with the unique conditions under which the problem is encountered. Such ability to modify his attack grows out of the knowledge of the alternative methods available and of the merits and limitations of each. Mere competence in the use of a single teaching method does not guarantee that an individual can deal intelligently with all problems in an area of instruction . . .⁴

The purpose of this study was to provide background information on the lecture method, the unit method, and the problems approach method to enable teachers to understand them more thoroughly and use them more effectively.

IV. PROCEDURES AND LIMITATIONS OF THE STUDY

This is a bibliographic-descriptive study limited to three methods: the lecture, unit, and the problems

⁴I. N. Thut and J. Raymond Gerberich, Foundations of Method for Secondary Schools, (New York: McGraw-Hill Book Co., Inc., 1949), p. 3.

approach. It is basically concerned with the presentation of background information on the methods listed with the view of ascertaining from the literature perused the method most effective in the teaching of social studies.

To facilitate the gathering and organizing of the data, information, and experimental findings, the problem was sub-divided into the questions posed earlier.

The sources for the study were professional literature: books on teaching in general, books on teaching social studies, yearbooks published by the National Council for the Social Studies and the National Society for the Study of Education, numerous articles in educational periodicals, theses, and reports of experiments conducted in methodology of social studies. The literature canvassed was that which was published during the years from 1940 to 1960.

It was hoped that the opinions and viewpoints of social studies authorities as well as their analyses would be of assistance in supplying the classroom teachers with pertinent information to help them, through a wise selection of methods, reach a high degree of efficiency and consequently, success in teaching social studies.

CHAPTER II

OBJECTIVES OF EDUCATION AND SOCIAL STUDIES

If methods of teaching social studies are to be properly evaluated on the basis of their efficacy in meeting the objectives of the course, then knowledge and statement of the objectives is needed.

The broad objectives of education and the specific objectives of social studies are somewhat identical. Objectives of society in which the schools exist influence the objectives of education. In turn, the objectives of education influence the specific objectives of social studies.

Broadly speaking, ours is a democratic society. The schools reflect the beliefs, aspirations, ideals, and objectives of our society. This means that the general objective of education is to educate people to live in a democracy and to be able to carry out their duties and obligations. In short the purpose of the schools is to prepare the students for democratic citizenship.

Hunt and Metcalf said that

We may say that the chief role of education in a democracy is intelligent or critical transmission of

cultural heritages, during the course of which disagreements among individuals and incompatibilities in personal outlook are exposed and resolved creatively.¹

Through the years, committees and commissions have sought to formulate objectives of education in order to meet the educational needs of youth in an effort to prepare them for democratic citizenship.

In 1918, the Commission on the Reorganization of Secondary Education in its report Cardinal Principles of Secondary Education stated that American education should be guided by the conception of the meaning of democracy and that each individual should have the opportunity to develop to his maximum to be of greatest usefulness to himself and to society.²

The seven cardinal principles or objectives set up by the Commission to accomplish these ends are as follows: (1) sound health knowledge and habits; (2) command of the fundamental processes, including reading, writing, arithmetical computation, and oral and written expression; (3) worthy home membership; (4) education for a vocation; (5) education for a good citizenship; (6) worthy use of leisure; and (7) ethical character. These objectives have been stated and restated, revamped and revamped, revised and modified in various ways by educational writers and theorists.³

¹Maurice P. Hunt and Lawrence E. Metcalf, Teaching High School Social Studies, (New York: Harper & Brothers Publishers 1955) p. 11.

²Arthur C. Bining and David H. Bining, Teaching the Social Studies in Secondary Schools, (New York: McGraw-Hill Book Co. Inc., 1952) p. 28.

³Ibid, p. 28.

In Alberta, for example, the Alberta Curriculum Committee has reduced the seven cardinal principles to three general purposes of secondary education. They are:

1. the fullest realization of personal potentialities
2. the preservation and improvement of the democratic social order
3. the understanding, utilization and improvement of the physical environment.⁴

In 1938 the National Policies Commission, a committee of the National Education Association, issued a publication which listed four groups of objectives pertaining to the everyday life pattern of an educated citizen. These objectives were organized under the following headings: objectives of self-realization, the objectives of human relationships, the objectives of economic efficiency, and the objectives of civic responsibility.⁵

The Education Policies Commission of 1944 published its Education for All American Youth. As a result of its findings, the emphasis was on the training for effective citizenship in a democratic society based on the needs of youth and on the needs that society requires and expects of its young. The Commission thought that

⁴Government of Alberta, Curriculum Guide for Alberta Secondary Schools, Department of Education, (Edmonton: Department of Education, 1950) p. 15.

⁵Maurice P. Moffatt, Social Studies Instruction, (New York: Prentice-Hall Inc., 1955) p. 3.

Schools should be dedicated to the proposition that every youth . . . should experience a broad and balanced education which will

1. equip him to enter an occupation suited to his abilities and offering reasonable opportunity for personal growth and social usefulness;
2. prepare him to assume the full responsibilities of American citizenship;
3. give him a fair chance to exercise his right to the pursuit of happiness;
4. stimulate intellectual curiosity, engender satisfaction in the intellectual achievement and cultivate the ability to think rationally; and
5. help him to develop an appreciation of the ethical values which should undergrid all life in a democratic society.

It is the duty of a democratic society to provide opportunities for such education through its schools.⁶

A study of the objectives set out in the reports mentioned above seems to indicate that at all times the objectives were focused on the youth, his needs, and his interaction with society in everyday living. Briefly, the objective of education concerns itself in the needs of the individual and the needs of society. Hunt and Metcalf stated that

Education is that process by which the young are helped to develop or acquire the ideational and symbolic equipment and physical skills believed necessary by adults to carry the chosen way of life.⁷

⁶Educational Policies Commission, Education for All American Youth, (Washington, 1944) p. 21.

⁷Hunt and Metcalf, op. cit., p. 3.

Bossing said that

The function of education is conceived to be the adjustment of man to his environment, which contemplates man's adaptation to and the reconstruction of his environment to the end that most enduring satisfactions may accrue to the individual and to society.⁸

In Alberta there are four functional objectives of education. They are personal development, growth in family living, growth toward competence in citizenship, and occupational preparation.⁹

Because the social studies field is directly concerned with the improvement of human relations and the effectiveness of group action, it can contribute greatly to the over-all purpose of education. In fact, the purpose and aims of social studies seem identical to the aims and purpose of education.

Preston stated that

the purpose of the social studies, briefly, is to assist the child to understand the concepts that describe and explain human society, and to develop the insights, skills, and moral qualities which are desirable in democratic citizenship. . . . The development of informed, responsible citizens who will participate intelligently in solving the problems of their human

⁸Nelson C. Bossing, Principles of Secondary Education, (New York: Prentice-Hall Inc., 1949) p. 264.

⁹Government of Alberta, op. cit.

relationships and the problems facing society is of paramount importance, today as never before.¹⁰

Moffatt, writing in Social Studies Instruction, had much the same view about the aims of social studies. He stated that

The objective of social studies is the development of an educated person who is personally effective, enjoys satisfactory social relationships, accepts responsibility as a citizen and is economically competent. In the past the development of the individual was regarded as the major responsibility of the social studies. Now it is believed that the subject has a broader responsibility. One objective is to impart practical knowledge; others are to encourage worthwhile habits and attitudes. Probably the most important outcome is to help in the development of a competent citizen who is inspired by real enthusiasm for the democratic way of life.¹¹

According to Bining and Bining the aims of social studies were:

1. the enrichment and development of the lives of pupils to the greatest extent of their abilities and powers within their environment, and
2. the training of pupils to take their places in a democratic society in such a way as to make their country a better place in which to live.¹²

To accomplish these broad aims and purposes of social studies, specific objectives have to be set and achieved. The authorities in the field of social studies differ to some extent as to what the specific objectives should be.

¹⁰Ralph C. Preston, Teaching Social Studies in the Elementary Schools, (New York: Rinehart and Co. Inc., 1958) p. 19.

¹¹Moffatt, op. cit., p. 6-7.

¹²Bining and Bining, op. cit., p. 33.

Bining and Bining believed that

The specific aims, therefore, should include the teaching of certain definite knowledge, advancement in intellectual life, and concomitant learnings such as habits, ideals, attitudes, and appreciations. These may be classified into five groups: (1) acquiring knowledge, (2) development of reasoning power and critical judgment, (3) training in independent study, (4) formation of habits and skills, and (5) training in desirable patterns of conduct.¹³

According to Preston, the specific aims of social studies instruction were: (1) knowledge and understanding of society; (2) attitudes and behaviors that make for good citizenship; (3) skill in applying scientific thinking to social problems; and (4) skill in handling the tools of social studies.¹⁴

Moffatt categorized the specific aims under three headings: (1) to initiate or improve skills; (2) to develop understandings; and (3) to develop attitudes.¹⁵

The Senior High School Curriculum Guide for Social Studies 10, 20, 30 of the Alberta Department of Education has also categorized the specific objectives under three headings: (1) understandings, (2) skills, abilities, and habits, and (3) attitudes.¹⁶

¹³Ibid., p. 34.

¹⁴Preston, op. cit., p. 19.

¹⁵Moffatt, op. cit., pp. 7-8.

¹⁶Government of Alberta, Senior High School Curriculum Guide for Social Studies 10, 20, 30, (Edmonton: Department of Education, 1955) pp. 7-10.

The content of social studies units is to be used to develop understandings or generalizations. All class activities and individual research should be directed to this end. Facts must be collected, organized, and studied in terms of the purposes of the unit. In addition, a student should memorize a reasonable amount of information, but he should not memorize irrelevant facts, but rather only those which are significant and which have been patterned within the framework of generalizations.¹⁷

Numerous skills, abilities and habits are to be developed by use of materials within the unit. Among the more common ones are locating information, studying materials, appraising materials, utilizing materials, participating in committee work, and reporting.¹⁸

Desirable social attitudes are to be established and undesirable ones are to be modified by the school. There are several basic attitudes or clusters of attitudes to which teachers should pay special attention. These have been listed in the Program of Studies for the Elementary School as self-respect, creativeness, scientific viewpoint, co-operation, responsibility, social concern and reverence.¹⁹

¹⁷Ibid., p. 7.

¹⁸Ibid., p. 8.

¹⁹Government of Alberta, Program of Studies for the Elementary School, (Edmonton: Department of Education, 1963, p. 7.

In summary, the basic task of education is to make young people acceptable members of the group of which they are part. In our case, the school's task is to help them become efficient democratic citizens. Social studies, because of the nature of their subject matter and methods, can be used to contribute greatly to the over-all aims and objectives of education. In fact, the basic aim of the social studies is identical with the basic purpose of education. However, to help achieve the general objectives of education, social studies should have specific objectives. These would appear to be: acquisition of knowledge, development of reasoning power and critical judgment, formation of habits and skills, and development of acceptable attitudes.

The task of this chapter has been to review the general objectives of education and the specific objectives of social studies. The task of the next chapter will be to examine the psychological principles of learning and the philosophy of education.

CHAPTER III

PSYCHOLOGY OF LEARNING AND THE PHILOSOPHY OF EDUCATION

I. PSYCHOLOGY OF LEARNING

Method is related to the nature of the learning process and to educational philosophy. The way a teacher teaches is determined largely by his knowledge of the learning process and his philosophical outlook.

The purpose of this chapter is to review briefly the psychological principles underlying learning and the philosophical assumptions under which our schools operate.

Through the years, numerous theories of learning have been expounded. Hilgard has reduced these theories to two basic groups: stimulus-response, which includes connectionism, conditioning, and behaviorism, and the cognitive, which includes the Gestalt, the field theory, and organismic.¹ Bulletin I, Foundations of Education states that "there are three viewpoints in psychology of learning that might today be considered alive and influential in education: connectionism, conditioning, and the field theory."²

¹Ernest H. Hilgard, Theories of Learning, (New York: Appleton Croft Inc., 1956), p. 8.

²Government of Alberta, Bulletin I, Foundations of Education, (Edmonton: Department of Education, 1949), p. 39.

Connectionism

Connectionism was an outgrowth of the association doctrine, a theory of learning influential in the nineteenth century. Briefly, the associationist psychology recognized that ideas originated in the brain centers and that learning occurred as a result of association of ideas.³

Connectionism has been defined as "the doctrine that all mental processes consist of the functioning of native and acquired connections between situations and responses."⁴ To Gates, the term "connection"

. . . refers to a functional relation between a situation and a response. It refers to an observable phenomenon and implies no neurological correlate. It implies nothing except that there is an observed tendency for a situation to be followed by a response.⁵

The basis of learning as interpreted by connectionists is connecting between stimulus and response.

³Maurice P. Hunt and Lawrence E. Metcalf, Teaching High School Social Studies, (New York: Harper & Brothers Publishers, 1955), p. 13.

⁴Peter Sandiford, "Connectionism: Its Origin and Major Features," Psychology of Learning, Forty-first Year-book of the National Society for the Study of Education, Part II, (Chicago: The University of Chicago Press, 1946), p. 97.

⁵Arthur Gates, "Connectionism: Present Concepts and Interpretation," Psychology of Learning, Forty-first Year-book of the N.S.S.E., Part II, (Chicago: The University of Chicago Press, 1942), p. 145.

Connectionists assume that, through repetition, responses "connect" with stimuli and tend to repeat themselves whenever the same stimuli are encountered. The term conditioned response may likewise be used to refer to the basic unit of learning as S-R theorists interpret it.⁶

Such concepts as stimulus or situation, response, connection, and organism are very important to connectionistic psychology. All human activities are regarded as responses by the human organism to stimuli or situations. In fact, a man's life has been described as a list of all situations he has encountered and the response he has made to them.⁷

Briefly, the connectionist theory states that the problem situation facing the organism, or learner, acts as a stimulus and brings out the responses or reactions which the learner feels is most appropriate. This behavior or reaction, which to connectionists is learning, is

. . . guided by a total attitude or set of the organism. Responses are determined in part by enduring adjustments and characteristics of the individuals raised in a given culture. But they are also influenced by more momentary tendencies.⁸

These momentary tendencies are

. . . the characteristics of the organism, its structure, its chemical and emotional states, its hungers and

⁶Hunt and Metcalf, op. cit., p. 13.

⁷Sandiford, op. cit., p. 99.

⁸Hilgard, op. cit., pp. 22-23.

thirst, its 'drives,' its 'likes and dislikes,' its 'goal direction,' its temporary sets and adjustments, its states of fatigue and other bodily conditions, its attitudes, interests, goals, and purposes.⁹

This attitude or set, in addition to determining how the learner reacts, also determines what satisfies or annoys him, and thus what responses are learned.

When an action tendency is aroused through preparatory adjustments, sets, attitudes, and the like, fulfillment of the tendency in action is satisfying; non-fulfillment is annoying."¹⁰

To Thorndike, prior to 1930, the effect of the response on the organism, whether it produced "satisfyingness" and furthered progress toward the goal or whether it produced "annoyingness" and retarded progress was a very important principle of learning.¹¹ The degree of satisfaction experienced by the learner determined whether the response would be continued, abandoned, or modified.

Thorndike thought that when a modifiable connection is made and accompanied by a satisfying state of affairs, the strength of the connection is increased.¹²

The strengthening effect of a successful outcome may be shown by (a) immediate repetition of the successful response, if the situation remains present, or (b) a greater probability that the response will appear the next time the situation is encountered.¹³

⁹Gates, op. cit., p. 28.

¹⁰Hilgard, op. cit., p. 18.

¹¹Gates, op. cit., p. 148.

¹²Hilgard, op. cit., p. 19.

¹³Gates, op. cit., p. 148.

On the other hand,

. . . if the connection is made and followed by an annoying state of affairs, its strength is decreased. In this law (law of effect) Thorndike is saying that rewards or successes further the learning of rewarded behavior whereas punishments or failures reduce the tendency to repeat the behavior leading to punishment, failure, or annoyance.¹⁴

After 1930, however, the weakening effects of annoying consequences in the law of effect were renounced. Connectionists felt that reward and punishment were not equal and opposite as had been implied. Rather reward appeared to be more powerful than punishments. According to Thorndike, punishments affected learning only indirectly.

In 1933, the connectionists brought out experimental evidence to support the law of effect. This evidence was described as the spread of effect and became the main characteristic of the new connectionism.

The experiments purported to show that the influence of a rewarding state of affairs acts not only on the connection to which it belongs but on the adjacent connections both before and after the rewarded connection, the effect diminishing in each step that the connection is removed from the rewarded one. The experiments lent support to the automatic and mechanical action of effect.¹⁵

Because of the nature of the connectionist theory of learning, it is logical that one of the characteristic forms of learning identified by the exponents of connectionism is

¹⁴Hilgard, op. cit., p. 19.

¹⁵Hilgard, op. cit., p. 29.

trial-and-error learning, or learning by selecting and connecting. When the learner is confronted with a problem situation and wishes to reach a goal, he selects a response. If the situation is familiar and the response has been established, he elicits that particular response. However, if the situation is unfamiliar or if the response is unsatisfactory, he rejects and searches for a new one to connect with the stimulus received. This selection of responses is one of the unique features of connectionism.

Another unique feature is that connectionism is atomistic. It stresses the analysis of behavior in order to discover the elements that are connected or bonded together.¹⁶ For example, a connectionist would analyze the elements of skill necessary to play basketball and then devise exercises to develop them.

Intellect and intelligence, to connectionists, are quantitative rather than qualitative. A man's intellect is the sum total of the bonds he has formed; and the greater number of bonds he has formed, the higher is his intelligence. Intelligence to them, then, is an additive function.

The connectionist school placed great emphasis on drill. Through practice the connections or bonds became stronger and more permanent. Sandiford stated that

¹⁶Sandiford, op. cit., p. 98.

Repetition of a connection with belonging, that is repetition of a belonging sequence, strengthens the connection even when the influence of the consequence of the connection (after effect) is discounted.

The educational significance of the findings, namely, that mere repetition of a situation has no effect on learning, that repetition of a connection has a little effect on learning, while repetition of a situation with belonging has a considerable effect on learning is obviously great. Best of all for learning purposes is the repetition of a connection whose effect is pleasurable, that is, a connection which is rewarded in some way.¹⁷

Gates took a more moderate stand when he stated that practice, drill, experience, and reaction are necessary for learning, but they do not guarantee it, much less explain it.¹⁸

Hilgard summarized the views of Thorndike, leading connectionist, on several typical problems of learning. Thorndike maintained that learning capacity depended upon the number of bonds formed and their availability. Practice and drill were important only so far as they permitted rewards to act upon connections. Repetition of a situation in itself did not modify the connection. To bring about motivation, Thorndike thought that rewards had to act on the neighboring connections to strengthen them. Punishments worked indirectly in that they forced the learner into selecting a new approach which could possibly bring about a reward. To get understanding, a learner had to build a body

¹⁷Sandiford, op. cit., pp. 124-125.

¹⁸Gates, op. cit., p. 159.

of connections pertinent to the understanding. When the situation was understood, it was a matter of transfer. There were enough elements in common with the old situation to permit old habits to act acceptably. Transfer of training was explained by the theory of identical elements. Reaction to new situations benefited by the identity of the new situations in part with old situations and also by a principle of analogy described as assimilation. In the matter of forgetting the connectionists thought there was a weakening or decay because of disuse of the learned connections.¹⁹

Conditioning

The conditioning theory accepts physical behavior as the basis of learning and emphasizes the functional relationship between sensory perception and the consequent behavior. Guthrie stated that

If we are interested in what he (the learner) will learn, we must turn to the observation of what he does (his responses) and the occasions for these responses (stimuli). . . . Responses or answers to the stimuli are limited to the contractions of muscles or the secretions of glands.²⁰

¹⁹Hilgard, op. cit., pp. 42-43.

²⁰Edwin R. Guthrie, "Conditioning: A Theory of Learning in Terms of Stimulus, Response, and Association," Psychology of Learning, "Forty-first Yearbook of the N.S.S.E., Part II, (Chicago: University of Chicago Press, 1942), p. 20.

This observation of the learner's actions, his muscular movements, can be measured and described.

. . . Certain stimuli lead regularly to reflex responses. Such natural reflexes are called unconditioned reflexes and the stimuli which produce them are called unconditioned stimuli. If a second stimulus, not originally leading to the response is frequently present slightly before or accompanying, the unconditioned stimulus, it presently comes to elicit the response. Such a stimulus is called a conditioned stimulus and the learned response is called a conditioned reflex.²¹

Learning, to exponents of conditioning, consists of an association between the behavior or activity of the learner (response) and the condition or circumstances (stimuli) that prompted such action. To Guthrie, this association was some stimulation of sense organs and a corresponding muscular contraction or glandular secretion.²²

A stimulus pattern that acts at the time of a response will, if it recurs, tend to produce that response.²³ Thus, we learn only what we do, right or wrong. If a wrong response is established, it will continue unless a new association can be made between the originating stimulus and a new activity. If it is desired to break up a habit (accelerate its forgetting) it is only necessary to cause other movements to occur in the presence of the cues to habits.²⁴

²¹Ernest H. Hilgard, Theories of Learning, (New York: Appleton Croft Inc., 1956), p. 50.

²²Guthrie, op. cit., p. 23.

²³Ibid.

²⁴Hilgard, op. cit., p. 56.

Hilgard thought that believers of the conditioning school of learning control the learning process by manipulating cues leading to behavior. He stated that

If you wish to encourage a particular kind of behavior or discourage another, discover the cues leading to the behavior in question. In one case arrange the situations so that the desired behavior occurs when those cues are present; in the other case, arrange it so that the undesired behavior does not occur in the presence of the cues.²⁵

Teaching, thus, consists in deciding on the appropriate or desirable behavior pattern and then in providing the stimulus which will bring out that behavior.

Any new behavior is produced by new combinations of stimuli which produce compromise responses.

In the first instance the essential stimulus was accompanied by many supporting secondary stimuli. In the second situation the original essential stimulus may be weakened or gone but the supporting stimuli have been associated with the response and are themselves sufficient to call forth the desired response. The change of signals or stimuli necessary to call forth behavior or response is the essence of learning. The combinations of stimuli are limitless and possibilities of substitute cues make learning complex.²⁶

Guthrie stated that a stimulus pattern gains its full associative strength on the occasion of its first pairing with a response.²⁷ However, responses are inhibited and

²⁵Hilgard, op. cit., p. 64.

²⁶Government of Alberta, Bulletin I, Foundations of Education, (Edmonton: Department of Education, 1949), p. 42.

²⁷Guthrie, op. cit., p. 30.

forgotten, and practice is necessary. Its effects do not depend upon mere repetition but rather on conditions of repetition. Practice is necessary to elicit the response from a variety of situations.²⁸ Further,

The secondary or complementary stimuli vary from situation to situation, and practice tends to cover a wide range of possible combinations. Effective practice can be carried on only when the dominant stimulus is clear and when the general situation resembles the environment under which future performance may be desired.²⁹

Hilgard also has analyzed and estimated Guthrie's position on a number of typical problems of learning. He thought that Guthrie found basis for differences in capacity both in differentiation of movement and discrimination among cues. Maturation of the learner was a significant factor in the differentiation and discrimination.³⁰

Practice produces consequences according to the principle of the attachment of cues to movements and not because of frequency. The more varied the movements in a skill the more varied are the cues.³¹ To teach a skill, one has to break up the wrong action and, in turn, encourage practice which will bring about successful movement.

²⁸Guthrie, op. cit., p. 32.

²⁹Government of Alberta, Foundations of Education, p. 42.

³⁰Hilgard, op. cit., p. 76.

³¹Ibid., p. 55.

In Guthrie's theory of learning, motivation has little place, being related to physiological drives and needs. The motivational state is important only because it determines the movements that enter into associative connection. Motivation affects learning through what it causes the individual to do.³²

Since Guthrie's theory emphasizes the mechanistic and repetitious nature of learning, it has little room for insight and understanding. Any learning that occurs with foresight is explained on the basis of conditioned anticipatory or readiness reactions based upon past experience.³³

Guthrie expected little transfer of learning because of his

principle of responses being conditioned to all adventitious contiguous stimuli. The only way to be sure to get desired behavior in a new situation is to practice in that new situation as well. To be able to perform in a variety of situations, you have to practice in a variety of situations.³⁴

Guthrie believed that forgetting occurred because there was interference with the old learning. A lapse of time aided forgetting because it gave rise to new responses which replaced the old and destroyed the connection between

³²Ibid., pp. 76-77.

³³Ibid., p. 77.

³⁴Ibid.

cue and response. An association is forgotten because the stimuli which brought on the original response have gradually been connected with other activities.³⁵

Field Theory

Field theory of learning emphasizes meaningful and "ideational" learning. Field theorists see

. . . learning as the discovery of meaning in a perceptual field--commonly called insight. Tested insights lead to generalizations which enable a learner to behave intelligently in similar confronting situations of the future.

Learning is always accompanied by understanding or grasp of meaning. This is true of all types of learning, whether habits, skills, attitudes, or knowledge.³⁶

A unique feature of the field theory is its emphasis upon the concept "field".. Hartman said that

All events in nature--and this statement plainly includes psychological and educational phenomena--always occur within some field, big or little, whose properties and structure explain the localized occurrences that it embraces and simultaneously permit increased control over it.³⁷

³⁵Ibid., pp. 77-78.

³⁶Maurice P. Hunt and Lawrence E. Metcalf, Teaching High School Social Studies, (New York: Harper & Brothers Publishers, 1955), pp. 14-15.

³⁷W. Hartman, "The Field Theory of Learning and Its Educational Consequences," Psychology of Learning, Forty-first Yearbook of the N.S.S.E., Part II, (Chicago: University of Chicago Press, 1946), p. 166.

The field is the entire frame of reference within which an event occurs. It is the environment, or as Lewin termed it the "life space".³⁸

Thus, learning is an interactive process between an individual and his environment.³⁹ A learner is confronted with a situation. He has a goal in mind. A tension is developed. Some aspect of his environment has to be interpreted if the goal is to be reached. The environment is analyzed in terms of the goal to see if he cannot cope with it. This seeing is insight.⁴⁰

Hilgard elaborated on the psychological tensions as a factor in learning.

The perception of an object or event may give rise to a psychological tension (a drive) or it may communicate with a state of tension already existing in such a way that this tension thereupon assumes control over motor behavior. The aroused 'valences', attractions, and repulsions of perceived goal objects act as environmental forces steering subsequent behavior. This behavior then leads to satiation or to the resolution of tension so that equilibrium is approached.⁴¹

³⁸Ernest Hilgard, Theories of Learning, (New York: Appleton Croft Inc., 1956), pp. 263-266.

³⁹Hunt and Metcalf, op. cit., p. 25.

⁴⁰Ibid., p. 26.

⁴¹Hilgard, op. cit., p. 261.

To field theorists, goals, individual likes and dislikes have great significance. Goal-seeking behavior is part of every learning situation. It may emphasize intellectual, physical or emotional needs. The problem of motivation then is to get students to see the importance and pertinence of classroom study to their goals.⁴²

When a person is attracted by an object that object is said to have positive valence. The person tends to move toward a region in life space (psychological field) that has positive valence, that is, toward an attractive goal or into a region where satisfying activity is possible. By contrast, negative valence refers to an object or region in life space, from which a person is repelled. That is objects and activities that a person avoids have negative valences.⁴³

Lewin adds that

The level of aspiration is defined as the degree of difficulty of the goal toward which a person is striving. Whether or not a person will learn a certain activity is deeply influenced by his trying or not trying to do so. Therefore, the factors which determine the level of aspiration are of basic importance for learning.⁴⁴

Unlike the associationists who isolated elements of a situation, field theorists integrate the elements into a functional unit and emphasize the structural nature of every situation. To them, the whole situation is to be considered before any interpretation is to be made. Said Hartman, "No items no matter how far apart they may seem to

⁴²Hunt and Metcalf, op. cit., pp. 26-27.

⁴³Hilgard, op. cit., p. 266.

⁴⁴Kurt Lewin, "Field Theory and Learning," Psychology of Learning, Forty-first Yearbook of the N.S.S.E., Part II, (Chicago: University of Chicago Press, 1946), p. 236.

be should be learned without asking what is the nature of the relation between them."⁴⁵ However, the interpretation the learner makes of the structural field determines in large part the meaning the situation has for him, and the learning in turn is a direct function of meaning.⁴⁶ The interpretation the learner makes is dependent upon his past experiences, goals, expectations, and his environment.⁴⁷ Since the background of experiences and purposes of individuals differ, no persons will interpret anything alike. Individual differences will be common.

Closely allied to the structure or configuration of environment is field theory's concept of "the whole."

What is important in field theory is the way the analysis proceeds. Instead of picking out one or another isolated element within the situation, field theory finds it advantageous to start with a characterization of the situation as a whole. After this first approximation the various aspects and parts of the situation undergo a more specific and detailed analysis.⁴⁸

Hartman stated that learning is differentiation, a process of moving from the vague and unclear to the particular and

⁴⁵Hartman, op. cit., p. 205.

⁴⁶The Government of Alberta, Bulletin I, Foundations of Education, (Edmonton: Department of Education, 1949), p. 43.

⁴⁷Hunt and Metcalf, op. cit., p. 27.

⁴⁸Lewin, op. cit., pp. 217-218.

sharply defined. It is progression from an undifferentiated homogeneous stage to a more elaborate and internally differentiated condition.⁴⁹

A new stimulus or response is marked by an absence of any differentiation. What one first perceives is units and wholes, then the parts and elements. Initial learning is a crude recognition of a crude massive whole with a minimum of internal organization, while further learning involves another whole that reveals a pronounced articulation among its parts.⁵⁰ Hilgard aptly summarized the changes brought through learning according to the field theory when he stated that

As one learns one increases in knowledge. To know more means to have a more highly differentiated life space, in which there are more sub-regions connected by defined paths. We know facts in relationship; we know what leads to what.⁵¹

And unlike the associationists, the field theorists accept problem-solving to be the development of insights into the relationships between the factors of the problem. Hilgard stated that

A problematical situation represents an unstructured region of life space. We do not know how to get from the given to the goal. We feel insecure until the

⁴⁹Hartman, op. cit., p. 202.

⁵⁰Hartman, op. cit., p. 203.

⁵¹Ibid.

region becomes structured. When it does become structured so as to permit problem solution, we have learned.⁵²

Hunt and Metcalf added that

. . . Problems are solved by bringing to bear meanings (insights) gained in previous learning situations. But in the process the earlier meanings are enlarged and refined, so that the learner achieves a reconstruction of his conceptual pattern. We shall refer to learning of this type as conceptual or reflective learning.⁵³

The concept of insights is one of the cornerstones of the field theory of learning. Hunt and Metcalf defined insight as a sensed course of action with reference to a goal and a confronting situation.⁵⁴ Hartman explained the concept of insight by stating that

. . . it connotes appropriate behavior in the presence of any life situation. Insight is really a kind of sight--mode or perception. It is, like all psychological processes a special kind of neural or cortical organization that is established as soon as the organism achieves, i.e., it is the internally apprehended correlate of the 'closing' of an incomplete configuration whose very incompleteness has produced the 'problem' initially by keeping the learner in a state of tension.⁵⁵

In other words, insight is the recognition of the proper procedure leading to a satisfactory solution. To get the point of an insight the learner must see it in relation

⁵²Ibid.

⁵³Hunt and Metcalf, op. cit., p. 15.

⁵⁴Hunt and Metcalf, op. cit., p. 27.

⁵⁵Hartman, op. cit., p. 191.

to his problem. And when he has developed an insight into a generalization, he has conceptualized.⁵⁶

Hilgard also summarized the views of the field theorists on problems of learning. He believed that capacity to field theorists was the result of a difference in differentiation. The life space of an intelligent person was structured more highly than that of a less intelligent person.⁵⁷

Practice and repetition are necessary. However, it is not repetition itself that is essential to learning, but a change in the cognitive structure. And a change in the cognitive structure may occur as a result of repeated experience.⁵⁸

Motivation is very important in field theory for cognitive structure is activated and changed by needs and tensions. In this regard concepts such as ego development and level of aspiration are significant.

Psychological success and failure depend upon ego-involvement in the task at hand. That is the goals must be real to the learner, so that if achieved, there is the elation of significant accomplishment; if not achieved, there is a chagrin or humiliation of defeat. . . . It is necessary to keep tasks at an appropriate level of difficulty so that the learners

⁵⁶Hunt and Metcalf, op. cit., pp. 28-29.

⁵⁷ Hilgard, op. cit., p. 284.

⁵⁸Ibid.

remain ego-involved. . . . Individuals tend to set momentary goals within range of activities in which there is ego-involvement. The momentary goal is referred to as level of aspiration.⁵⁹

The level of aspiration is defined as degree of difficulty of the goal toward which a person is striving.

Understanding, to the field theorist, means perceiving relationships, being aware of relationships between parts and wholes, and knowing the means to consequences. Such understanding will result in a change in the cognitive structure.⁶⁰

The concept that explains transfer of learning is transposition. Common patterns, configurations, and relationships are discovered between an earlier learning and the new situations. These common patterns may be applicable to the new situation.⁶¹

To a field theorist, motivated forgetting is important.

The dynamics are rather complicated with interruptions in an ego-involved task leading usually to better retention and to attempts at resumption when the opportunity is offered.⁶²

⁵⁹Ibid., p. 277.

⁶⁰Ibid., p. 284.

⁶¹Ibid.

⁶²Ibid.

Broadly speaking, learning refers to the growth of knowledge, interests, and skills. How it is defined specifically depends on the viewpoint of the psychologist. The field theorist defines learning in terms of changes in the cognitive structure, and stresses the ability of the learner to see and understand relationships, see insights, and to reconstruct new configurations. Those who support the associationist or stimulus-response theory define learning as changes between stimulus and response and stress the fragmental and repetitious nature of learning.

However, there are certain essential characteristics and principles of learning common to schools of psychology. It is in these that the classroom teacher will be most interested. A number of psychologists and educationalists have attempted to summarize them.

Burton's article was an excellent summary of the overall principles of teaching and learning. He discussed the general purposes of education, general principles of learning, the role of group process in learning, motivation of learning, ways and means of preserving the learner's security, and the setting for learning.

Basically, learning to Burton was a change in the individual as a result of the interaction of that individual and his environment. The learning process is

experiencing. The learning situation, which is dominated by a purpose or goal set by the learner or accepted by him, must be realistic to the learner, meaningful and take place within a rich and satisfying environment if it is to be of a maximum value. Burton's main contention was that a proper balance should be maintained between the development of the independent individual and the social individual.⁶³

To Goetting, the essential characteristics of learning are self-activity, pupil purpose, pupil interest, classroom climate, environmental influence, and pupil growth.⁶⁴

Macomber's list of basic psychological principles that govern learning include the principle of individual differences, the principle of trait differences, the principle that learning is a process of experiencing, the principle that each person is a creative individual, the principle of pupil insight, the principle that motivation can be explained and understood only in terms of multiple causation, the principle that pupils react as an integrated whole, the principle that pupils need success, security, and

⁶³William Burton, "The Basic Principles in a Good Teaching-Learning Situation," Phi Delta Kappan, 39:242-248.

⁶⁴M. L. Goetting, Teaching in Secondary Schools, (New York: Prentice-Hall Inc., 1942), pp. 7-10.

prestige, the principle of transfer of learning, and the principle of drill.⁶⁵

Hilgard has listed fourteen principles on which the various schools of psychology appear to agree.

1. In deciding who should learn what, the capacities of the learner are very important.
2. A motivated learner acquires what he learns more readily than one who is not motivated.
3. A motivation that is too intense may be accompanied by distracting emotional states, so that excessive motivation may be less effective than moderate motivation for learning some kinds of tasks.
4. Learning under the control of the reward is usually preferable to learning under the control of punishment. Correspondingly, learning motivated by success is preferable to learning motivated by failure.
5. Learning under intrinsic motivation is preferable to learning under extrinsic motivation.
6. Tolerance of failure is best taught through providing a backlog of success that compensates for experienced failure.
7. Individuals need practice in setting realistic goals for themselves, neither so low as to elicit little effort nor so high as to forebode failure. Realistic goal setting leads to more satisfactory improvement than unrealistic goal-setting.
8. The personal history of the individual, for example, his reaction to authority, may hamper or enhance his ability to learn from a given teacher.
9. Active participation by a learner is preferable to possessive reception when learning, for example, from a lecture or a motion picture.
10. Meaningful materials and meaningful tasks are learned more readily than nonsense materials and tasks not understood by the learner.
11. There is no substitute for repetitive practice in the overlearning of skills or in memorization of unrelated facts that have to be automatized.

⁶⁵Freeman Glen Macomber, Teaching in the Modern Secondary School, (New York: McGraw-Hill Book Co. Inc., 1952), pp. 27-44.

12. Information about the nature of a good performance, knowledge of his own mistakes, and knowledge of successful results aid learning.

13. Transfer to new tasks will be better if, in learning, the learner can discover relationships for himself, and if he has experience during learning of applying the principle within the variety of tasks.

14. Spaced or distributed recalls are advantageous in fixing material that is to be long-retained.⁶⁶

McConnel outlined his point of agreement under the heading, "Reconciliation of Learning Theories."

1. The entire learning process is highly complex, and involves the arrangement of material to be learned into some pattern or design that is meaningful to the learner.

2. Learning must be explained in terms of relationship between events (including physical and mental activities) rather than in terms of independent isolated phenomena.

3. Motivation, or desire to learn, is essential for every successful learning situation.

4. Good motivation includes setting up some goal, and learning consists of regulating and directing one's behavior in a manner that will enable one to achieve that goal.

5. Most learning includes some intermediate activity, intellectual or physical or both, between the initiation of a purpose and the acquisition of the goal. This intermediate action might better be called "approximation-and-correction" rather than "trial-and-error."

6. Any learned response may be modified according to the consequences that follow it.

7. For economy of time and effort practice must involve more than mere repetition and monotonous drill.

8. Learning is essentially complete when fundamental relationships are clearly perceived and fundamental principles involved are mastered.

9. Transfer of training is roughly proportional to the degree in which situations are similar in structure and in meaning.

⁶⁶Ernest Hilgard, "Some Agreement on Practical Matters," Theories of Learning, (New York: Appleton-Century Croft Inc., 1956), pp. 485-487.

10. The ability to recognize differences (discrimination) is as important in the learning process as the ability to recognize similarities (generalization).

11. The learning process is a function of the "whole child" and, as such, is influenced by physical, social, and emotional as well as intellectual factors.⁶⁷

II. PHILOSOPHY OF EDUCATION

Just as a teacher should understand the psychology of the learning process to be able to teach more effectively, so should he have some understanding of the philosophical assumptions underlying education.

There are numerous philosophical systems. It is difficult to classify them because of overlapping categories and similarities. However, they can be identified through certain focal points that tend to distinguish one philosophy of education from another.⁶⁸

One approach that is used in identifying the philosophies is based on the principles which distinguish the various schools of general philosophy. According to this identification there is to be found realism, idealism,

⁶⁷T. R. McConnell, "Reconciliation of Learning Theories," Psychology of Learning, Forty-first Yearbook of the N.S.S.E., Part II, (Chicago: University of Chicago Press, 1942), pp. 256-286. Cited by Government of Alberta, Bulletin I, Foundations of Education, (Edmonton: Department of Education, 1949), pp. 45-46.

⁶⁸Edgar B. Wesley and Stanley P. Wronski, Teaching Social Studies in High Schools, (Boston: D. C. Heath and Co., 1958), p. 11.

scholasticism, and pragmatism. The most fundamental difference among philosophies of education would be in the role allotted to ordinary human experience.⁶⁹

Pragmatists, instrumentalists, or experimentalists emphasize experience as the basis of education.⁷⁰ Further,

. . . pragmatic philosophy of education includes the view that knowledge and action are inextricably tied together and that all knowledge is derived from and tested by experience. . . . On its strictly pedagogical side pragmatism holds the view that the method of problem solving . . . is also the method of learning. Pragmatism holds that the end of education is growth, and that the optimum conditions of growth consist in freedom to investigate together with unfettered sharing of ideas in an open system of human association.⁷¹

The realists believe that ultimate reality is the objective world, a world independent of any and all human experience.⁷² To them, theory and reason are important. And the purpose of education is to help the student understand the world as it really is. Desirable educational ideas and doctrines are those which correspond to the structure of the objective world.⁷³

⁶⁹B. Othanel Smith, "Philosophy of Education," Encyclopedia of Educational Research (Third Edition), (New York: The Macmillan Company, 1960), p. 959.

⁷⁰Ibid.

⁷¹Ibid.

⁷²Ibid.

⁷³Ibid.

Idealists claim that ultimate reality is spiritual or ideal. To them the purpose of education is

. . . to develop the individual as a finite personality and to do so in such a way as to bring him into harmony with a superior life. . . . This aim is to be achieved partly through positive expression of the self, partly by use of dialectic methods to develop judgment and reasoning, and partly by teaching those skills, knowledges, and ways of thinking essential to responsible citizenship.⁷⁴

The scholastics hold the view that reality consists of the objective world of material existence as well as of spiritual or ideal existence. They believe that the purpose of education is to enable the individual to reach his fullest stature.

. . . man, in the completest sense of his fulfillment, is possessed of fully developed reason and of that righteousness which manifests itself in the obedience to the law of God. These two aspects of man, reason and faith - constitute the primary basis of scholastic educational theory. Through persistent appeal to the individual's intelligence and free will, the educational program develops the creative and rational virtue.⁷⁵

Another approach used in identifying the philosophies is on the basis of attitude toward education and social change.⁷⁶ On this basis there are four schools of educational philosophies: perennialism, essentialism, progressivism, and reconstructionism.

The perennialists believe that there are some truths and ideas which are absolute and never change. The purpose of the school is to help the students perceive these truths.⁷⁷

⁷⁴Ibid.

⁷⁵Ibid.

⁷⁶B. Othanel Smith, op. cit., p. 960.

⁷⁷Wesley and Wronski, op. cit., p. 12.

The perennialists look upon the school as an instrument for maintaining and improving society. But ordinary traditions are not considered to be of sufficient force to provide a stable outlook, especially in periods of fundamental change. The required stability is to be supplied either by religion or metaphysics.⁷⁸

Essentialists believe that there are certain minimum essentials with which the school should be concerned. These essentials, representing knowledge and wisdom of the past or cultural heritage, should be conserved and transmitted to oncoming generations.⁷⁹ To essentialists, the school is an instrument for passing on the cultural heritage. Whether it contributes to social improvement or not depends on its success in transmitting the culture.⁸⁰

The progressivists emphasize scientific method of inquiry. They feel students should learn to test hypotheses by observing the consequences. To them, the purpose of the school is to keep social traditions and institutions in line with scientific and technological progress. They feel that social ideas and institutions lag behind scientific and material progress.

It is thus the task of the school to educate in such a way as to bring about and maintain a high degree of social integration among the various aspects of society.

⁷⁸B. Othanel Smith, op. cit., p. 960.

⁷⁹Wesley and Wronski, op. cit., pp. 12-13.

⁸⁰B. Othanel Smith, op. cit., p. 960.

Stress is placed upon the study of problems in the school by methods of problem solving conceived in terms of scientific inquiry.⁸¹

The reconstructionists feel that there is definite need to set up broad societal goals to guide social reform. It is not enough for the school to educate merely to reduce the social lag. According to the reconstructionists

The school, as a major social institution, should actively work toward the reconstruction of society along the lines of goals which are agreed upon through a process of social consensus.⁸²

On the basis of the identification of philosophies of education given, it would appear that the philosophy of education in Alberta leans heavily on the pragmatic and the progressive. Further, the schools perpetuate democratic aims, ideals, values, and principles.

Bulletin I, Foundations of Education lists a number of the aims and ideals of a democratic society.

1. Democratic society maintains respect for the individual. The individual is the basic unit of society and a respect for his personality is the basic premise for lasting social structure.

2. Democratic society has faith in human intelligence and believes that men and women are capable of governing themselves.

3. Democratic society relies on appeal to reason.

4. Democratic society expects every citizen to be responsible and perform his duties and obligations.

5. The democratic society expects its members to place general welfare of community and state ahead of personal welfare.

⁸¹Ibid.

⁸²Wesley and Wronski, op. cit., p. 12.

6. Democratic society defends the civil liberties of all men.

7. Democratic society looks on the future with optimism for it believes it can solve its problems for the best of mankind.⁸³

The fact that our society is democratic and that the basic aim of the school is to perpetuate the society's ideals and values poses some interesting philosophical considerations for education.

First, if our schools are to teach students to live in a democracy, all activities and experiences, educational and extra-curricular, should be democratic. The students and teachers should work co-operatively. The better schools are those institutions in which democracy is lived rather than places in which pupils study about democracy.⁸⁴ It would be somewhat incongruous and illogical to try to teach democratic ideals and values in an undemocratic atmosphere. As Alexander and Halverson asked:

Does one demonstrate democratic faith in the integrity and potentialities of human beings by resorting to such methods? That is, can we teach people democratic values through undemocratic procedures?⁸⁵

⁸³Government of Alberta, Bulletin I, Foundations of Education, (Edmonton: Department of Education, 1949), pp. 13-17.

⁸⁴Freeman Glen Macomber, Teaching in the Modern Secondary School, (New York: McGraw-Hill Book Co., Inc., 1952), p. 48.

⁸⁵William Alexander and Paul Halverson, Effective Teaching in Secondary Schools, (New York: Rinehart & Co. Inc., 1957), p. 16.

Though there is agreement on the basic aim of schools and education, there are still conflicting viewpoints on the ways and means of achieving the aim, as was in evidence by the inclusion of the Minority Report in the Report of the Royal Commission on Education in Alberta.⁸⁶

Orato pinpoints the reason for the conflict.

If education is for systematic indoctrination, learning by drill and repetition is the method par excellence. . . . If education is for the independent reconstruction of patterns, the emphasis should be on learning by co-ordination and on training in independent thinking.⁸⁷

Regardless, the school must be the instrument for social improvement. It must guide pupils in the search for better answers to our problems and to teach them how to live more effectively and fully than the present generation.⁸⁸

Today the character of the school population is much different than it was several decades ago. Whereas previously the secondary school population was quite select, today it is very diversified as a great number of students choose to remain in school. This means that the needs of the

⁸⁶Alberta Teachers' Association, A Condensation of the Report of the Royal Commission on Education in Alberta, (Edmonton: Alberta Teachers' Association, 1960), pp. 125-155.

⁸⁷P. T. Crato, "Conflicting Viewpoints in Contemporary American Education," Education Administration and Supervision, 22:299-313, Jan., 1936.

⁸⁸Macomber, op. cit., p. 51.

pupils are more varied. The school has to adopt an approach or method which will provide for the needs of these students.

If the individual is to be an effective member of society, he must meet the demands which society makes upon him; and the school must help him develop the attitudes, competence, and knowledge which will enable him to meet these demands. It is the school's task to help young people overcome their personal inadequacies or lacks so that they may satisfy their needs in socially acceptable ways and develop into well-adjusted and competent individuals.⁸⁹

With the needs of the individual playing such a significant role in educational goals, it would be only logical that the curriculum be based on his needs and the needs of the society.

The problem then becomes that of developing a curriculum that will provide continuous pupil experiencing in the performance of these basic functions of social living--a curriculum which will lead to increased understanding of these functions and to the ability to perform them more and more effectively for the good of both the individual and the social group.⁹⁰

Therefore, the teaching method used should consider the individual learner and be organized to help him satisfy his needs.

⁸⁹James Quillen and Lavone Hanna, Education for Social Competence, (New York: Scott, Foresman and Co., 1948), pp. 29-30.

⁹⁰Macomber, op. cit., p. 54.

In our philosophy of education the pupil--the whole pupil--is at the center of education. By this is meant that the pupil is the center of reference for the organization of school objectives, for teaching, for learning activities, and for the teaching method.⁹¹ Pupil interests and needs are the starting point. Objectives and goals which are meaningful are set, permitting students to participate in activities and experiences appropriate to their degree of maturity. However, Bining and Bining caution against too great an emphasis on pupil-centeredness of education. They stress that there should be a balance between the emphasis on the individual and emphasis on the group or society.

The development of the individual capacities of the pupil must continue to play an important part in education, but socialization of the pupil is just as important, for, if society is to function in an intelligent manner, there must be a considerable homogeneity of thought, feeling, and habit in the group.⁹²

Miel and Brogan hold even stronger views on social learning and socialization than do Bining and Bining.

⁹¹M. L. Goetting, Teaching in Secondary Schools, (New York: Prentice-Hall Inc., 1942), p. 11.

⁹²Arthur C. Bining and David H. Bining, Teaching the Social Studies in Secondary Schools, (New York: McGraw-Hill Book Co., Inc., 1952), pp. 57-58.

The process of democratic socialization means learning more and more responsible membership in a society whose discipline requires that the individual maintain his integrity and discover his uniqueness within the context of a group which supports him but which he also supports and enriches. In other words, democratic socialization embodies the interwoven processes of individuation and socialization.⁹³

Therefore, a student in order to develop his innate individual potential and to achieve social competence should have life-like experiences and activities. A curriculum emphasizing the mastery of bodies of knowledge is not adequate.

Leading educators are convinced that if the school is to become a truly effective force in achievement of social and personal integration, its classroom curriculum must become much more of an experience curriculum based primarily upon the social and individual needs.⁹⁴

An experience curriculum will provide the student with training

. . . in the solutions of his problems of living. He must have continuous experience in facing and clarifying these problems and in working out the solutions himself. He cannot do this if someone is continuously directing him.⁹⁵

What is done may be done better by the teacher, but the student will not have the full benefit if he does not do

⁹³Alice Miel and Peggy Brogan, More Than Social Studies, (Englewood Cliffs, N.J.,: Prentice-Hall Inc., 1957), p. 6.

⁹⁴Macomber, op. cit., p. 57.

⁹⁵Macomber, op. cit., p. 68.

it himself. The role of the teacher then is that of the guide rather than the authority and the director.

Democracy is dependent on freedom of thought and upon convictions arrived through reasoning and scientific method.⁹⁶ Such being the case the school has to provide opportunities to develop reasoning and scientific inquiry. It has ample opportunity to do this through the utilization of the problems method approach. Alexander and Halverson stated that

. . . the way of solving problems reflectively becomes content for the teacher and the learner alike to the point where eventually many pupils will learn how best to solve their own problems. This scientific method is really the only way of learning and must be the basis of teaching method.⁹⁷

⁹⁶Macomber, op. cit., p. 50.

⁹⁷Alexander and Halverson, op. cit., p. 10.

CHAPTER IV

EVALUATION OF METHODS USED IN TEACHING SOCIAL STUDIES

I. INTRODUCTION

Definition of Method

What is meant by the term "method" when applied to social studies instruction? Moffatt defined it as

. . . the procedure followed by the teacher in directing the learning process. It is composed of a series of important steps placed, as the word "method" implies, in orderly, logical, and effective arrangement. . . . In general, method might be considered as the process of planning, guiding, sharing, and evaluating learning with a group of pupils.¹

Thut and Gerberich defined method as

. . . a general plan of action formulated to achieve a particular type of educational outcome. That outcome may be the mastery of a prescribed body of subject matter; the exploration of large areas of knowledge with mastery to be determined . . .; or the development of power to cope satisfactorily with the physical and social environment.²

According to Alexander and Halverson, method is the sum total of the teacher's work with learners to determine the latter's goals, to plan and carry on their goal-seeking activities, and to evaluate their goal accomplishments.³

¹Maurice P. Moffatt, Social Studies Instruction, (New York: Prentice-Hall Inc., 1955), p. 146.

²I. N. Thut and J. Raymond Gerberich, Foundations of Method for Secondary Schools, (New York: McGraw-Hill Book Co., Inc., 1949), p. 7.

³William Alexander and Paul Halverson, Effective Teaching in Secondary Schools, (New York: Rinehart & Co., Inc., 1957), p. 41.

Classification of Methods

There are numerous classifications of methods. Coleman, after examining numerous texts and monographs on methodology, stated there are "no workable classifications of methods with meaning to the inexperienced teacher or to the teacher preparing to teach."⁴ Each authority in the social studies field classifies the methods according to his particular view. Wesley listed fourteen methods on the basis of their particular point of emphasis.⁵ Schutte listed methods of instruction and classified them into two groups: the authoritative and the developmental.⁶ Stiles and Dorsey classified methods into three categories: teacher-centric methods, pupil-centric methods, and co-operative group methods.⁷

Selection of Methods for the Study

For this study the lecture, problems approach, and the unit methods have been selected. The lecture method will

⁴Charles H. Coleman, "The Maze of Methods," Social Studies, 30:123, March, 1939.

⁵Edgar Bruce Wesley, Teaching Social Studies in High Schools, (Boston: D. C. Heath & Co.,) p. 430.

⁶T. H. Schutte, Teaching the Social Studies on the Secondary Level, (New York: Prentice-Hall Inc., 1942), pp. 326-327.

⁷Lindley Stiles and Mattie Dorsey, Democratic Teaching in Secondary Schools, (Chicago: J. B. Lippincott Co., 1950), p. 79-89.

be representative of the teacher-centric group, problem approach of the pupil-centric group, and the unit method of the co-operative group methods.

II. LECTURE METHOD

Description

By lecture method is meant a more or less continuous discourse by the teacher for the purpose of instruction. Since the specific purpose is the presentation of facts, it is teacher-centered and teacher-dominated. However, it may include assignments of readings and measurement of achievement and the teacher may ask a few questions to stimulate interest and focus attention on the topic to be dealt with.⁸

Origin and Development

The lecture method has been used for many centuries. It can be traced to the medieval universities of Europe. There, when books and manuscripts were relatively scarce, its prime purpose was to impart knowledge to confirm authoritative doctrine and to interpret the texts and manuscripts.⁹

⁸Walter Monroe and Arlyn Marks, "General Methods of Teaching," Educational Administration and Supervision, 24: 497-512, Oct., 1938.

⁹Arthur C. Bining and David H. Bining, Teaching the Social Studies in Secondary Schools, (New York: McGraw-Hill Book Co. Inc., 1952), p. 64.

With the development of the scientific spirit in the eighteenth century the lecture method gained another function. It was used to present in a systematic manner the various aspects of a field of knowledge.¹⁰

According to Bining and Bining the lecture method is most widely used in American colleges and universities. However, in Europe the lecture method has been perfected and has been used successfully and thoroughly in both the universities and the high schools. The success with which it has been used in European secondary schools can be attributed to the local conditions: highly trained teachers, their select type of pupils, and the military discipline of the schools.¹¹

Philosophy Underlying The Lecture Method

There are several philosophical assumptions underlying the use of the lecture method. First, education is the acquisition of knowledge and teaching is telling pupils the facts, the correct answers, and what is important to be learned.

The student was considered an empty vessel into which could be poured the wisdom gathered by advanced study, age, and experience. The philosophy of education involved a passive, not an active concept of learning.¹²

¹⁰Ibid.

¹¹Ibid., p. 65.

¹²Nelson L. Bossing, "Teaching in Secondary Schools," (New York: Houghton Mifflin Co., 1952), p. 137.

Secondly, it is assumed that all pupils are equally interested in what the teacher considers important and will assimilate the material at the same rate.¹³ Further, while lecturing there is a tendency of presenting an organized body of knowledge to be acquired whether or not the pupil sees any relation between it and his own needs. The learning tends to be passive.¹⁴ This assumption is in direct contrast to the psychological understanding that learning is most effective when the student is active, either mentally or physically, strives to achieve meaningful goals, and when methods are used which give him maximum opportunity for self-expression.

Thirdly, it is assumed that the school is teacher-centered and teacher-dominated. The teacher is the transmitter of culture and the dispenser of knowledge. It is further assumed that all teachers are equally gifted in the ability to hold attention and interest of a widely diversified group.¹⁵

Briefly, the philosophy behind the lecture method is the philosophy of the traditionalists. It is the traditionalists who take the view that

¹³Stiles and Dorsey, op. cit., p. 80.

¹⁴G. T. Buswell, "Psychology of the Newer Methods of Teaching," Elementary School Journal, 46:14-22, Sept., 1945.

¹⁵Stiles and Dorsey, op. cit., p. 80.

School subjects educate the child, facts are the essentials of learning, school subject-matter is conducive to growth, children learn what is assigned, what we think was beneficial to us is most certainly good for our children and should be enforced upon them, learning should start with what the teacher thinks is worthwhile, and that informational knowledge marks the difference between an educated and an uneducated mind.¹⁶

Psychology of Learning and the Lecture Method

The lecture method illustrates one interpretation of the teaching-learning process, that is, that pupils learn and assimilate what teachers tell.¹⁷

Critical analysis of the lecture method reveals the following assumptions, each of which may be questioned: (1) The teacher's role is to tell pupils what they need to know. (2) The pupil learns by listening to the teller, reviewing notes taken on the lecture, perhaps thinking, but usually memorizing what is told, and thereby absorbing what he needs to know.¹⁸

There is a fallacy in the first assumption. Pupils learn more effectively when they seek to reach a goal which is important to them, or when the desire to learn comes from within them rather than being imposed from the outside.

Another essential condition for learning is motivation. In fact, motivation might be termed the sine qua non of learning. . . . But without some form of

¹⁶C. A. Weber, "A Reply to Critics of 'Progressive' Methods in Education," Education Administration and Supervision, 31:79-86, Jan., 1945.

¹⁷William Alexander and Paul Halverson, Effective Teaching in Secondary Schools, (New York: Rinehart & Co., Inc., 1957), p. 11.

¹⁸Ibid.

motivation, there will be no response on the part of the individual and hence no learning whatsoever. . . . Children learn to do things that are related to their needs, interests, and goals, but tend to ignore those activities which are not so related.¹⁹

Because the lecture method is teacher-centered, the teacher is not only responsible for selecting what is to be learned but also in motivating the pupils to learn. In fact, he is responsible for most of the motivation. The manner in which he presents the subject matter as well as the subject matter itself are very important in bringing out student reaction. And even then, it is very unlikely that any lecture can be so presented that all hearers will think that all the material satisfied their needs.²⁰

Further, with the lecture method, there is a tendency to develop passivity on the part of the students.

Methodology which is limited to classroom lecture and assigned reading runs afoul of one of the chief principles of learning, namely, that we learn what we do and that active responses, mental and physical, are necessary. There is a danger of extreme passivity when a process of pouring knowledge either by teacher or textbook is carried too far.²¹

¹⁹Glen M. Blair, "The Psychological Interpretation of Teaching," Education Administration and Supervision, 33:321-338, Oct., 1947.

²⁰Alexander and Halverson, op. cit., p. 11.

²¹G. T. Buswell, op. cit., p. 17.

However, Bining and Bining took issue with this implication that pupils do not learn when they are passive and stated that the term "pupil passivity" is loosely applied.²²

Because pupils are passively seated in a classroom listening to a talk, it does not follow that their minds are not active. In many such situations pupils have literally been seated on the edge of their seats avidly taking in every idea that is presented.²³

In the last few decades the chief trend in the psychology of learning has been toward an organization of experience rather than toward a summation of experience.²⁴ Learning then is a reorganization of experience. With the lecture, however, there is too great a tendency toward summation of experience.

All psychologies of learning recognize the importance of responses which are meaningful to the learner.²⁵ Despite this recognition, however,

Much of what passes for learning in high school classrooms is unquestioningly sheer verbalism. The teacher uses expressions and concepts which are beyond the students' experiences or comprehension levels and these are memorized and given back to the teacher. . . . Lectures may be beyond the comprehension of many of the students.²⁶

²²A. C. Bining and D. H. Bining, op. cit., p. 66.

²³Ibid., p. 67.

²⁴C. A. Weber, op. cit., p. 85.

²⁵Ibid.

²⁶Blair, op. cit., p. 325.

Psychologically, beginning experiences should be real and concrete, for a learning situation involves a transition from a concrete practical situation to an abstract, general situation.²⁷ The prime purpose of the lecture method is to impart facts and knowledge. Thus there is little opportunity to provide real and concrete experiences. It is assumed that the pupils have the necessary background. Should they not have the background, they are in difficulty and the facts presented will not be meaningful. For an individual to acquire new skills, knowledge, or understandings, he must acquire the necessary backgrounds and prerequisites for them.²⁸

Furthermore, mere facts are not retained for long. Ebbinghaus stated that after one day sixty-six percent of the material learned was forgotten. After six days it was almost seventy-five percent, and after one month seventy-nine percent was forgotten.²⁹ Thus students can learn

²⁷Buswell, op. cit., p. 18.

²⁸Blair, op. cit., p. 324.

²⁹Hermann Ebbinghaus, Memory: A Contribution to Experimental Psychology, (New York: Teachers College, Columbia University, 1913), p. 76.

many facts and pass examinations but the facts will be forgotten if they are not developed into ideas.³⁰

Fact must tie up with fact in a meaningful way or we forget it. Acquisition of facts does not necessarily mean that the proper associations, connections, and inter-relations will be made.

The acquisition of facts is an easy matter. The translation of facts into ideas seems to require explanation, time, effort, repetition, and a period of maturing. Facts function only when they have been woven into the perfected pattern.³¹

If facts in themselves are just so much verbalism that are easily forgotten unless they are taught for the sake of complete ideas, it would appear that education is not justified in stressing factual information. The lecture method, whose prime purpose is to stress factual information, is based on unsound psychological principles.

However, Bossing was of the opinion that the lecture method could be based on sound psychological principles. When the lecture is expository in nature, the general principles of induction-deduction should be used. To him,

³⁰Ken H. Hoover, "Lecturing: A Wedge Between Theory and Practice," Clearing House, 34:51-53, Sept., 1959.

³¹Edgar B. Wesley, "Facts or Ideas in the Social Studies," Historical Outlook, 24:28-30, Jan., 1933.

exposition may well follow some adaptation of the general outline of induction made famous by Americanized Herbartian 'Five Formal Steps.'³²

In the first step, preparation, the purpose of the lesson is given, student experiences are brought into perspective, and sometimes a proper background is developed. In presentation new data and facts pertinent to the problem are added to the old ones. In the third step, comparison-abstraction, data is compared and analyzed to discover relationships between the old ideas and new ones. In generalization the implications are brought out and conclusions formulated. In the final step, application, the conclusions or principles derived are applied to explain further facts. Used according to the above outline, the lecture method would be based on sound psychological learning principles and would do more than just stress the acquisition of facts.³³

Research Findings

A number of studies and experiments have been conducted in several fields and at several levels where the efficacy of the lecture method was examined and tested.

³²Bossing, op. cit., p. 141.

³³Ibid.

In comparing lecture and discussion procedures, Ruja concluded that students in discussion groups did not achieve better subject matter mastery than did the students in the lecture groups nor were there significant differences in emotional adjustments of the two groups.³⁴

L. C. Mix compared experimentally the lecture method and the socialized recitation method in teaching two Social Studies 20 classes in an Edmonton composite high school. He found that in teaching factual knowledge the lecture method was more effective. He assumed that the teacher using the lecture method was more conscious of the aims and objectives of the lesson and thus gave more pertinent facts. However, the socialized recitation method prepared the students to meet problems and find solutions as well as did the lecture method.³⁵

Greene compared the effect of the lecture method, unguided reading, and guided reading on student achievement in tests after presentation of a topic. In comparing the lecture with unguided reading he found that good readers did better from their own reading than from the lecture.

³⁴Harry Ruja, "Outcome of Lecture and Discussion Procedures in Three College Courses," Journal of Experimental Education, 22:386-394, June, 1954.

³⁵L. C. Mix, "An Experimental Comparison of Two Methods of Teaching Unit II of the High School Social Studies 20," (Unpublished Master's Thesis, the University of Alberta, Edmonton, 1954).

The average student did as well from the lecture method as from unguided reading. But the lecture method helped the poorer reader. Further, poorer readers indicated a preference for the lecture as a method of presentation. In comparing the lecture method and guided reading, he found that guided reading was superior to the lecture in retention of material. For example, average students got approximately 57% correct after lectures and 83% after the guided reading. On the delayed tests the former disappeared to 46% and the latter to 64%. In fact, guided reading appeared to be superior to both the lecture and the unguided reading. He also found that inference items were retained slightly better than the information items after the guided reading procedure, but not after the lecture.³⁶

Ray conducted an experiment in social studies instruction at the grade eleven level to test the effectiveness of the lecture method and socialized recitation. He found that lecture is significantly better for teaching facts but that there was no significant difference between the two for developing understandings. In affecting student attitudes toward the political right or left, he

³⁶E. B. Greene, "Certain Aspects of Lecture, Reading, and Guided Reading," School and Society, 39:619-624, May, 1934.

discovered that socialized recitation produced a tendency to the left whereas lecturing produced a tendency to the right.³⁷

Eschen reported on an experiment to evaluate the best approach to teaching contemporary problems. A control group was taught current events one period a week with the emphasis on reporting current events while an experimental group met daily to study contemporary problems. The findings suggested that the lecture approach was effective in liberalizing student viewpoints and superior in bringing about desirable informational outcomes. The experimental group, however, showed greater superiority in understanding contemporary problems. He also concluded that below average students profited more from the discussion method of teaching.³⁸

Monroe and Marks, after reviewing a number of experiments on the lecture method, concluded that the more mature and more able students fared out better under the lecture

³⁷Douglas W. Ray, "An Experimental Comparison of the Relative Effectiveness of Two Methods of Teaching the Social Studies in Grade 11 (1960)," (Unpublished Master's Thesis, The University of Alberta, Edmonton, 1960).

³⁸Clarence R. von Eschen, "An Evaluation of a Secondary School Course in Contemporary Problems from Certain Stated Points of View," Journal of Educational Research, 34:265-271, Dec., 1940.

method than did the less capable and less mature ones. They also stated that in most of the experiments, student achievement in classes taught by lecture method was found to be equal to or superior to the achievement of the control group.³⁹

Stovall compared research on lecture versus discussion. In the acquisition of information, the lecture and group discussion are about equal in effectiveness when the criterion is immediate recall of facts. However, discussion produces better results in long-term retention. The research summarized also indicated that discussion was significantly superior to the lecture in bringing about the ability to evaluate, synthesize, draw inferences, perceive relationships, and make applications of the material. And although lectures can change attitudes, discussion has a greater effect and is more conducive to the development of desirable interpersonal relationships.⁴⁰

³⁹Walter Monroe and Arlyn Marks, "General Methods of Teaching Evaluated: Results of Research," Education Administration and Supervision, 24:581-592, Nov., 1938.

⁴⁰Thomas F. Stovall, "Lecture vs Discussion," Phi Delta Kappan, 39:255-258.

Use And Efficacy Of The Lecture Method

Despite the research that has been conducted in the use of the lecture method, there is still no consensus among the authorities as to its value and efficacy.

Moffatt stated that there was no justification for the lecture in the secondary school teaching. The use of such method tended to leave the pupil an inactive and a more or less passive learner. However, he approved the use of lecturing in describing materials, in explaining events and trends, and in answering pupils' questions.⁴¹

Delaney took the opposite view. He held that lecturing was a very important method of teaching, a method that was not used often enough.⁴² Horn held a similar view. He stated that the lecture method has been greatly undervalued.⁴³

Bining and Bining stated that

In the social studies the acquiring and understanding of knowledge is important. In choosing methods the teacher has to consider this aim. The modified lecture method has a place in the social studies above all subjects. Especially is this true in the study of history.⁴⁴

⁴¹Maurice P. Moffatt, Social Studies Instruction, (New York: Prentice Hall Inc., 1955), p. 148.

⁴²Arthur A. Delaney, "Don't Downgrade the Lecture," The Clearing House, 35:285-286, 1961.

⁴³Ernest Horn, Methods of Instruction in the Social Studies, (New York: Scribner's, 1937), p. 323.

⁴⁴Bining and Bining, op. cit., p. 67.

After reviewing research on lecture versus discussion, Stovall concluded with favorable remarks on the lecture method.

But research findings afford little basis for the wholesale disapproval of the lecture. It is of some value in attaining all of the major objectives of social studies instruction. Obviously worthwhile discussion cannot be carried on unless the participants have some knowledge of facts, and it is logical to look upon lecture as a means of introducing topics for discussion, and for providing basic information in an efficient manner.⁴⁵

Despite the trend to methods of instruction which put a premium upon student activity, the lecture method cannot be ignored as a method of teaching. Because of its peculiar values, it has a place in secondary school instruction.

Today, the trend is to mass media of communication. The public is subjected to the influence of television and radio. The school has some responsibility for training young people to be discriminating listeners. The use of the lecture method in schools can help provide this training in listening.⁴⁶

Further, one of the objectives of the school is to prepare the student for life after graduation. In the

⁴⁵Thomas Stovall, "Lecture vs Discussion," Social Education, 20:10-12, Jan., 1956.

⁴⁶Bossing, op. cit., p. 139.

everyday world an individual comes into contact with many types of lecturing. Therefore, students in school should be given an opportunity to be exposed to it.⁴⁷

Hunt and Metcalf believed that lecturing has a place in reflective method.

There are two points in reflection where lecturing (or telling) may be highly fruitful. One is at the point where a teacher is trying to help students clarify or feel a problem (he may need to present negative evidence, which is often best done through telling) or where he wishes to describe some situation in which values are in conflict, in hope that students will feel involved because of analogous situations in their own lives.

The other point where telling may be appropriate is while testing hypotheses. When a teacher has access to evidence not available to students, he may wish to give facts from his own experience or from his reading.⁴⁸

Douglass and Mills maintained that the lecture method is efficacious in meeting all the objectives of social studies instruction provided it is used properly. As a means of imparting information, it is more effective than having pupils read the same information. The teacher is better able to express the meaning than is the printed

⁴⁷Schutte, op. cit., p. 329.

⁴⁸Maurice P. Hunt and Lawrence E. Metcalf, Teaching High School Social Studies, (New York: Harper & Brothers Publishers, 1955), p. 121.

page. In developing skills and habits, telling arouses interest, explains the details of the skill, and calls attention to the inaccurate response. Lecturing is also effective as a means of developing attitudes and ideals. The personal approach to dealing with emotions is far better than any impersonal approach.⁴⁹

Bossing added that

In certain forms of appreciative learning the lecture offers a most advantageous way to establish the best mind-sets and to arouse adequate emotional toning for the appreciations to be developed.⁵⁰

Bining and Bining summarized the uses of the lecture method. Effective ways to utilize the method would be to give overviews, to supplement and aid the pupil's reading, to give a background, to save time for the pupils, to arouse interest, to give an assignment, to explain terms and correct faulty ideas, and to make summaries and give reviews.⁵¹

The efficacy of the method is minimized because of certain limitations. The major limitation is that with the lecture there is a tendency to encourage pupil passivity rather than pupil activity. However,

⁴⁹Hubert H. Mills and Harl R. Douglass, Teaching in High School, (New York: The Ronald Press Company, 1957), p. 208-209.

⁵⁰Bossing, op. cit., p. 139.

⁵¹Bining and Bining, op. cit., p. 68.

If the term pupil activity gives due regard to the mental processes it must be recognized that it is possible for the lecture to direct the thought processes of pupils in such a way as to be considered activity of the highest type.⁵²

There are other significant limitations. Pupil interests and needs and their apperceptive background may be overlooked. The pupils may not possess the ability to analyze, organize, and assimilate the lecture material. They may not have developed the degree of maturity necessary for a reasonable understanding of the lecture.⁵³

Dorsey and Stiles have reviewed experiments testing the efficacy of the lecture method. They concluded that

Results of scientific investigation into the usefulness of the lecture method of teaching in secondary schools suggest that:

1. More mature pupils profit from the lecture method.
2. Students who have a highly developed verbal ability are most likely to respond to this approach.
3. Existing rapport within the classroom group and between teacher and individual pupils has a direct bearing upon the effectiveness of the procedure.
4. The relationship between the lecture and the learner's problems and needs contributes significantly to the method's usefulness.
5. The ability of the lecturer to lead listeners to share and assimilate the material contributes directly to the values of the lecture method.⁵⁴

⁵²M. L. Goetting, Teaching in Secondary Schools, (New York: Prentice-Hall Inc., 1942), p. 169.

⁵³Ibid.

⁵⁴Dorsey and Stiles, op. cit., p. 81-82.

III. UNIT METHOD

Definition and Description

The unit may be defined as an organized body of information and experience designed to bring about significant outcomes for the learner, outcomes such as attitudes, understandings, skills, abilities, generalizations, and appreciations.⁵⁵ Only material which can contribute to promoting them is selected. Learning through study of units

. . . is described in terms of adaptations. Learning has taken place or the adaptation has been made only when there has been a change in attitude, when some special ability has been acquired, or when some skill or manipulation has been attained. There can be no partial adaptation; it has or it has not been made. Mastery has been attained only when the adaptation has been made.⁵⁶

Branom concluded that

A unit in the social studies is a body of closely related worthwhile materials which can be studied as a whole and which cause pupils to perform different activities that help to give them those experiences which are needed in everyday living.⁵⁷

⁵⁵Edgar B. Wesley, Teaching Social Studies in High Schools, (Boston: D. C. Heath & Co., 1950), p. 486.

⁵⁶Walter Monroe and Arlyn Marks, "General Methods of Teaching," Educational Administration and Supervision, 24:497-512, Oct., 1938.

⁵⁷Frederick Branom, The Teaching of Social Studies in a Changing World, (New York: W. H. Sadlier Inc., 1942), p. 210.

Johnson agreed that the unit was a segment of experience cut out for study. However, he did not think it to be a method, although he believed that within it method was involved. Further, to him the unit was many things: a project, topic, contract, and problem.⁵⁸

Wesley stated that there is no such thing as the unit method, but there are unit methods. Almost all methods and all kinds of pupil activity could be used within the framework of the unit method.⁵⁹ In other words, the various ways of teaching a unit may be designated collectively as the unit method.⁶⁰

The Senior High School Curriculum Guide for Social Studies 10, 20, and 30 defines the unit method as

. . . one in which related and significant subject matter and experiences are integrated and organized in such a way that learning results in adaptation in personality and behavior. The method assumes that the learner is conscious of working toward a goal, that he is interested, that there is an orderly plan to be followed, that there is flexibility in learning procedures to be used, and that evaluation is continuous.⁶¹

⁵⁸Earl Johnson, Theory and Practice of the Social Studies, (New York: The Macmillan Co., 1956), p. 202-203.

⁵⁹Wesley, op. cit., pp. 493-494.

⁶⁰Wesley, op. cit., p. 485.

⁶¹Government of Alberta, Senior High School Curriculum Guide for Social Studies 10, 20, and 30, Department of Education, (Edmonton: Department of Education, 1955), p. 15.

Bossing stated that there are two major classifications of units: the subject matter unit and the experience unit. Subject matter units focus attention on subject matter to be learned and organize it logically, while the experience unit directs the learner to certain experiences that are bound around a child's interests or some significant social problem and which will modify his behavior. However, he is very definite in maintaining that it is only the experience unit which provides the learning experiences for behavioral changes.

If all learning is the resultant of the interaction of the learner with an environmental problem-situation in which some satisfactory adjustment of the learner to the situations in question involves modifications in his basic behavior patterns, then . . . there can be only one basic kind of learning, namely: learning through experience that has as its end product change in behavior. By this same token there can be only one kind of unit possible for this conception of learning, and that is the experience unit.⁶²

There are five formal steps in the unit procedure: preparation or exploration, presentation, assimilation, organization, and recitation. The first step, exploration is intended to give the teacher information regarding the students' knowledge of the unit and to motivate learning for the pupils. During the second step, presentation, the teacher gives an interpretative overview of the unit and thus prepares the students for the work involved.

⁶²Nelson L. Bossing, Teaching in Secondary Schools, (New York: Houghton Mifflin Co., 1952), p. 63.

Assimilation, the third step, requires a great amount of time. Guided by study sheets containing references, problems, and assignments, the students study the selected subject by reading widely and by undergoing experiences. The task of the teacher here is to direct the activities and study of the pupils. In the fourth step, organization, the students bring together the acquired facts in some form of systematic outline. The last step of the procedure, recitation, is intended to give the students an opportunity to give an oral account of certain portions of the unit.⁶³

Origin and Development

The modern origin of the unit idea may be found in the writings of Herbart, who believed that education was a thinking process.⁶⁴ He stressed four essentials of the learning process: clear apprehension by the pupil of each individual fact; association or comparison of all facts; systematizing and classification of facts into concepts; method or application of the knowledge learned.⁶⁵

⁶³Wesley, op. cit., pp. 494-495.

⁶⁴Wesley, op. cit., p. 485.

⁶⁵J. G. Umstattd, Secondary School Teaching (New York: Ginn and Co., 1953), p. 140.

In the Herbartian scheme of things, isolated and unrelated meaningless facts had to be worked over in the mind, relationships developed, and meanings expanded and modified.⁶⁶ In order to provide for the assimilation of new ideas, recognition of the relationships, and the development and use of meanings, Herbart devised his famous method of instruction. This method consisted of five steps: preparation, presentation, comparison, generalization, and application. The first three steps led to the recognition of the general principle which was stated in the fourth step. The fifth step was the application of the principle.⁶⁷ These steps implied unity of learning from the first to last step.⁶⁸

Charles McMurray, like the Herbartians, placed emphasis on oral presentation in the development of lessons and solutions of problems. He believed that the teacher must be responsible for relating the subject matter to the experience of the learner by drawing upon the learner's knowledge and leading him to interpret in the light of his

⁶⁶Jean Alexander, "Influence of Pedagogical Scholarship on Methods: from Herbart to Morrison," The Historical Approach to Methods of Teaching the Social Studies, Fifth Yearbook of the National Council for the Social Studies, (Philadelphia: McKinley Publishing Co., 1935).

⁶⁷Wesley, op. cit., p. 485.

⁶⁸Bossing, op. cit., p. 60.

experiences. To do this, he stressed the desirability of the progressive, step-by-step development of large topics.⁶⁹

These topics were based upon the development of the notion and constituted logical units of thought around which related facts and experience could be centered in well-defined and co-ordinated units of instruction. . . . The development of the topic was usually on the five formal steps by which the child was led through the various aspects of the topic or problem chosen and came at last to the general truth or solution of the problem.⁷⁰

Dewey's influence on the development of the unit method was significant, resulting in marked changes in social studies instruction. He emphasized activity in the learning process. This emphasis led to life-like learning experiences. He further stressed the inter-connectedness of the various school subjects. To him, thinking was a method of intelligent learning. There were definite steps to problem solving.⁷¹

Kilpatrick stressed the project and the idea of purposeful activity. The pupil must have a well-defined purpose and the activity must fulfill the pupil's purpose.

Kilpatrick distinguished four steps in the purposeful activity. Purposing step set up the goal; the planning

⁶⁹Alexander, op. cit., p. 22.

⁷⁰Ibid., p. 34.

⁷¹Edwain H. Reeder, "John Dewey and the Activist Movement," The Historical Approach to Methods of Teaching the Social Studies, Fifth Yearbook of the National Council for the Social Studies, (Philadelphia: McKinley Publishing Co., 1935).

step prepares the means necessary for realizing the goal; the executing step performs the means; and judging step evaluates the extent of realization of the goal.⁷²

Morrison's contribution to the development of the unit method are two-fold. First, he brought forth his five formal steps of learning: exploration, presentation, assimilation, organization, and recitation. His other contribution

. . . is his mode of arranging content into meaningful wholes or units, and his procedure for making the content function in the life of the pupil. His contribution in this direction is the best single contribution to the development of the unit in the secondary school.⁷³

However, Baldwin was critical of Morrison's unit mastery technique because in the steps of exploration and presentation, the teacher was too much in the center of educational activity and the pupil had too little to say in the proposing and planning of activity. He advocated the use of the laboratory method to eliminate the short-coming.⁷⁴

Several have commented on the evolution of the unit method as it is used today. Lawson stated that the unit was the outgrowth of the project method. The project method held subject matter as the center of attention, but

⁷²Umstattd, op. cit., p. 145.

⁷³Ibid., p. 149.

⁷⁴J. W. Baldwin, "Teaching the Social Studies in Units by the Laboratory Method," Social Studies, 40:58-63, Feb., 1949.

the unit method stresses the child as the center of education.

Change in procedures was an attempt to make experiences meaningful, to lend reality to the work of the schools, to unite the fragments of subject matter, to enhance learning through doing, and to adjust teachers to the concept of the child's whole personality.⁷⁵

Caruthers held the same belief. He stated that the unit approach has gone through evolutionary changes. Originally it was a scheme for organizing subject matter. Today it is a well-defined method of teaching through which critical thinking is encouraged, problems are solved, and other techniques are employed.⁷⁶

Alexander very aptly summarized the development when she stated that

The unit plan does not appear as anything radically new or revolutionary. Rather it seems to have developed gradually and logically from methods already in use and as a means of applying principles of present day educational theory. The Herbartian general notion or "circle of thought," the large topic of McMurray, the problem, the project and the learning unit--it is difficult to determine just when and how one changes into the other. General ideas become the basis for large topics, topics become problems, problems merge into projects and both problems and projects change into units.⁷⁷

⁷⁵Douglas Lawson, "A Critique on the Present Status of Unit Teaching," Education Administration and Supervision, 26:424-429, 1940.

⁷⁶J. Wade Caruthers, "Another Look at the Unit Approach," Social Education, 21:11-18, Jan., 1957.

⁷⁷Alexander, op. cit., p. 36.

Philosophy Underlying The Unit Method

What are some of the philosophical assumptions underlying the unit method?

Under the old theory of learning, the objectives and goals of education were mastery of the subject matter. Today the objectives and goals are to provide varied learning experiences for different types of growth of the student.

The modern teacher thinks of his responsibility as being largely that of providing situations which will result in experiences upon the part of the learners which will in turn influence growth and will result in desired behavior and the desired acquisition of information, social, and mental habits. . . . The modern teacher, therefore, plans learning situations which will develop social and emotional skills and habits as well as develop physical and intellectual skills and habits.⁷⁸

Learning through the unit method is child-centered. As can be inferred from the above quotations, the all-round education can be completely realized only through the full development of each youth.⁷⁹ The teacher then must know his pupils as well as their interests, needs and inadequacies, and treat each of them as an individual. The unit method provides for individual differences.

⁷⁸H. H. Mills and H. Douglass, Teaching in High School, (New York: Ronald Press, 1957), p. 9.

⁷⁹Umstattd, op. cit., p. 139.

Furthermore, the unit method is based on the belief that the curriculum should grow out of the needs of the individual and society.

Only such material as will provide the experience through which pupils will arrive at the unit understanding should be used. Knowledge for its own sake has no place in teaching by units, and the subject matter is never used unless it has a direct bearing on the aspects studied.⁸⁰

Stormzand and Lewis believed that the primary emphasis would always be on values of the learning experience rather than on contributing results.⁸¹

Davey and Hill held the same view when they stated that "the pupil is to learn from experience, but that he is not to learn the experience. Education comes from experience, but experience in itself is not education."⁸²

At the heart of the unit method is purposeful activity. Unlike the lecture method which appeared to emphasize passive learning, the unit method emphasizes the view that learning is active, that we learn by doing. Wide and varied experiences and life-like situations are provided. Through the activities that are part of these situations and experiences, concepts are developed and adjustments and adaptations are

⁸⁰J. R. Davey and Howard Hill, "The Unit and the Unit Method in the Social Studies," The Contributions of Research to the Teaching of Social Studies, Eighth Yearbook of the National Council for the Social Studies.

⁸¹M. J. Stormzand and Robert Lewis, New Methods in Social Studies, (New York: Farrar & Rinehart Inc., 1935), p. 15.

⁸²Davey and Hill, op. cit., p. 3.

made by the student. In view of this, the teacher focuses attention upon life situations and plans learning experiences to result in better adjustment in various areas of life.⁸³

The unit method also has as its basis the view that democratic ideals and principles should be perpetuated. If the psychological principle that learning is primarily a process of experiencing is accepted, then also is accepted the premise that we learn as we experience and what we experience.⁸⁴ And if the school is to make a contribution to the ability to live democratically, then it must be an institution where opportunity is provided for democratic experience.

The modern world has become increasingly more social in nature, so that the necessities of good living, such as food, shelter, fuel, transportation, and recreation, are seldom secured through strictly individual efforts. If these necessary social processes are to be carried on satisfactorily, or if the individual is to secure the personal satisfaction made possible through social action, he must acquire the understandings, attitudes, and skills that make for effective social relations. The psychological principle of learning by doing, which figures so prominently in the experience unit, demands that these be developed through participation in a social group. In the experience unit, opportunity for social participation grows naturally out of the projection of common purposes, cooperation in attaining

⁸³Mills and Douglass, op. cit., p. 10.

⁸⁴Freeman G. Macomber, Teaching in the Modern Secondary School, (New York: McGraw-Hill Book Co., Inc., 1952), p. 48.

them, and sharing of experiences in a common enterprise. . . . In short, one of the major reasons why the experience unit was invented was to provide the socializing experiences desired to prepare the pupil to become an effective citizen in a democratic society.⁸⁵

The role of the teacher, according to the philosophy behind the unit method, is much different from the role of the teacher according to the philosophy underlying the lecture method. Whereas in the lecture method the teacher is a transmitter of culture and the dispenser of knowledge, in the unit method he is the guide.

Instead of functioning as a taskmaster who prescribes the learning activities, and supervises and evaluates the pupil's efforts in carrying out his assignments, the teacher now functions as a guide who helps the pupil identify, work toward, and ultimately to reap-praise his own objectives.⁸⁶

Psychology Of The Unit Method

The unit method marks a shift in learning theory. The old conception of learning emphasized additive learning.

Learning by this theory became simply an additive process, a matter of adding separate items of knowledge or skills until enough of these had been acquired when they could be brought together into some over-all pattern. . . . As a result much of our education activities in the past were carried out through assignment of segments of subject matter to be learned

⁸⁵I. N. Thut and J. Raymond Gerberich, Foundations of Method for Secondary Schools, (New York: McGraw-Hill Book Co. Inc., 1949), pp. 287-288.

⁸⁶Thut and Gerberich, op. cit., 288.

without particular reference to the relationship of similar segments of subject matter previously learned, or, in the future to be learned.⁸⁷

The unit method is based on a newer theory of learning, the Gestalt-field theory, which emphasizes learning by the whole. To field theorists

The whole is more than the sum of its parts; specifically, any whole consists of its parts plus a relationship between them; and any change in the relationship, while it may not affect the structural parts, does affect the whole.⁸⁸

The unit method facilitates such learning by the whole. In fact, "unit organization is based on the principle that people learn more easily if they first glimpse the whole, then study the various parts, and finally synthesize their learning."⁸⁹

The learning process takes place in a physical environment or field.

In order for learning--adaptive behavior--to take place there must be in the field both a need of the organism and an obstacle to its satisfaction. This presence of an impediment is by definition a necessary condition of learning; for without it there is no adaptation, but an immediate satisfaction of the need, and hence no learning.⁹⁰

⁸⁷Bossing, op. cit., p. 61.

⁸⁸James Thornton, "Gestalt Psychology of Learning," Education Administration and Supervision, 24:177-194, March, 1938.

⁸⁹Dorothy Fraser and Edith West, Social Studies in Secondary Schools, (New York: The Ronald Press, 1961), p. 74.

⁹⁰Thornton, op. cit., p. 182.

Thus the first step in the learning process is the creation of a tension which is the motivating force. Once there is the need or tension, the next step is to resolve the tension. This will mean a survey of the field.⁹¹

In the overview of the unit, the students survey their field. The overview is a presentation of the whole before an attempt is made to understand the parts derived from the whole.⁹² The students react to the problem situation as a whole and not in segments or parts in isolation. The field theorists insist that

. . . the first responses are undifferentiated; that responses are to total situations, not to discrete parts; that functional analysis follows on perception of the whole; and that wholes cannot be produced merely by synthesizing their parts.⁹³

The students realize the goal to be achieved and understand that if they are to achieve it, certain changes and adjustments in behavior will be necessary. In their efforts to achieve the goal, they will examine every phase of their progress and activity toward it in terms of the total

⁹¹Ibid., p. 183.

⁹²Ibid., p. 187.

⁹³Ibid.

situation and will be making modifications in their behavior accordingly.

The unit method thus guides the student in seeing the learning material as a whole. And

. . . when a child is properly guided in organizing subject matter in the light of the whole he will not only learn the facts more economically, but he will be able to unify facts and to generalize.⁹⁴

Further, when a student has a mass of unrelated wholes, seldom does he see the relationship between the material and his experience. Under the unit method this is not the case. The learning material is presented as a unified total; then the relationship to the pupil's experience is shown. Education then is not an infusion of ideas, but a process of facilitating pupil development.⁹⁵

The unit method places great emphasis on pupil motivation and interest. Students help plan, then carry out the plans, and finally help evaluate the activities and results. With the emphasis on pupil participation at all levels, it is easy for the pupils to see the goals and work toward them with stronger interest.⁹⁶

⁹⁴Ibid.

⁹⁵Ibid., p. 185.

⁹⁶Fraser and West, op. cit., p. 74.

The use of the unit method also gives the teacher ample opportunity to provide for individual differences. With the emphasis on varied procedures and activities, the teacher can encourage each student to use materials and select activities that are appropriate to his level of achievement. Thus each can find the satisfaction and encouragement of success.⁹⁷

Through the unit method there is opportunity to develop a planned sequence of experiences and activities focused on selected objectives. The skills, attitudes, and understandings are developed as a result of a variety of experiences. It has been proven that the learner is able to retain his learning longer if he derives it from many situations and then practices his skill in many situations.⁹⁸

The unit method with its provision for flexibility of procedures enables the teacher to plan for applications of various selected skills, as well as for emphasis upon other objectives.⁹⁹

⁹⁷Ibid., p. 75.

⁹⁸Ibid.

⁹⁹Ibid.

A number of authorities have endeavored to summarize the psychological assumptions and principles on which the unit method is based.

Mills and Douglass enumerated three concepts of the Gestalt psychology which are basic to the unit method.

They are:

1. that the nature of the total learning situation is determined not merely by the sum of the elements which comprise it but also by the relationships which exist among the different parts;
2. that the parts of the learning situation have meaning only in terms of their relations to each other and to the whole; and
3. that the unifying factor in organizing the elements of a learning situation is the purpose of the learner.¹⁰⁰

Swindler stated that organization and teaching under the unit plan is based on a number of assumptions:

1. The child is the beginning, the center, and the end of the learning process.
2. The teacher must see the end in the beginning.
3. An individual cannot learn, for retention and use, isolated and unrelated items of subject matter.
4. Learning does not result inevitably from lesson performance.
5. Attention of the pupil is focused upon true learning products, changed character and personality of the pupil. These learning products are expressed in terms of:

- (a) adaptation
 - (i) attitudes of understanding
 - (ii) attitudes of appreciation
 - (iii) special abilities

- (b) habits and skills¹⁰¹

¹⁰⁰Mills and Douglass, op. cit., 9. 232.

¹⁰¹Robert E. Swindler, Social Studies Instruction in the Secondary Schools, (New York: Prentice-Hall Inc., 1933), p. 179.

The Senior High School Curriculum Guide for Social Studies 10, 20, and 30 stated that the unit method is in harmony with the following basic principles upon which classroom procedures should be founded.

1. Learning takes place through the interaction between the individual and his environment.
2. Pupil interests are the starting point and the directing force in learning.
3. Learning is effective to the degree that it is meaningful and purposeful to the pupil.
4. Learning is most effective where the environment is rich and stimulating.
5. Pupils should participate in and assume increasing responsibility for their own learning.
6. Learning is most effective when it is consistent with the findings of psychology and sociology.
7. Pupils must have freedom as they demonstrate ability to accept responsibility.
8. Pupils must have opportunities to do critical or analytical thinking.
9. Direct and conscious provision should be made for developing basic skills.
10. Recognition must be given to the importance of incidental or concomitant learning.
11. Learning experiences should be arranged to provide a sequence of growth.
12. Learning experiences should be made to provide for individual differences among pupils.¹⁰²

¹⁰²Government of Alberta, op. cit., p. 15.

Research Findings

Hill and Davey¹⁰³ reviewed and summarized experiments by Funk¹⁰⁴, Lynn¹⁰⁵, Phipps¹⁰⁶, and Stegmeir¹⁰⁷.

In Lynn's experiment students using the unit method achieved higher results on a test than did a group using textbook recitation method. During the second year of the experiment the gains were even greater for the unit method group. Further, pupils taught by the unit method read more broadly and developed a greater amount of skill in locating materials. Lynn concluded that it appeared as if pupils of higher intelligence profited more from the use of the unit method than did the students of low intelligence.

¹⁰³Davey and Hill, op. cit., pp. 10-20.

¹⁰⁴M. N. Funk, "A Comparative Study of the Results Obtained by the Method of Mastery Technique and the Method of Daily Recitation and Assignment," (Unpublished Master's Thesis, University of Chicago, 1927).

¹⁰⁵Robert Joseph Lynn, "A Comparative Study of the Textbook Recitation and Unit Course Methods in the Teaching of European History to Second Year High School Pupils," (Unpublished Master's Thesis, Wittenberg College).

¹⁰⁶Madge Phipps, "The Unit Mastery Method vs the Daily Recitation in Teaching High School History," (Unpublished Master's Thesis, University of Chicago, 1927).

¹⁰⁷Clarence Conrad Stegmeir, "An Experimental Study of the Daily Recitation and the Mastery-Technique Methods of Teaching," (Unpublished Master's Thesis, University of Chicago, 1930).

In Phipp's experiment a group using material organized in units achieved higher scores on a test than did a group taught by the daily recitation method.

Steigmeir compared results obtained by the daily recitation and Morrison's five step cycle and mastery technique. The five step cycle consisted of preparation, presentation, assimilation, organization, and recitation, Morrison's recommended organization of the teaching process. The mastery technique, on the other hand, was his view of the psychology of learning. It accompanied the steps and aimed at mastery of the unit. It consisted of the following: (1) pre-test; (2) teach the principle involved; (3) test for desired learning; (4) diagnose the difficulty in case of failure; (5) modify the teaching procedure; (6) re-teach; (7) re-test; (8) repeat the process until all the pupils have mastered the principle and gained the necessary understanding and information.¹⁰⁸ Steigmeir found that students using the mastery technique did better on the tests, were superior in both outlining and in using books, showed slight superiority on a test of historical thinking, and a greater improvement on a reading test. Mastery students also indicated greater retention of learning after a year's lapse.

¹⁰⁸Wesley, op. cit., pp. 494-495.

Funk, however, found no difference in achievement between groups using the daily recitation method and those using Morrison's five-step procedure. The students in the recitation-method groups did as well on tests, organized material as well, applied information as effectively, and improved in reading as much.

In summarizing their review of the experiments, Hill and Davey stated that although the studies comparing unit method and daily recitation procedures did not offer conclusive evidence of the superiority of one method over another, there was evidence to indicate that the groups using the unit method, appeared to read more widely and to develop greater initiative and self-dependence in study habits.

Further, the studies seemed to indicate that a unitary organization and teaching procedure produced better results in terms of information acquired and attitudes and study abilities developed.¹⁰⁹

Douglass and Pedersen compared the achievement of two equated groups of pupils, one working under the unit plan and the other under the study-recitation. They concluded that the Morrison mastery plan was superior to the supervised study and recitation in a single period.

¹⁰⁹Hill and Davey, op. cit., pp. 19-20.

There appeared to be little difference in the merit of the two types of plans although the results seemed to favor large unit plans more frequently than they favored the daily unit plans.¹¹⁰

Wrightstone reported on an experiment with the activity program in New York city schools. Although the schools involved were elementary, the observations and conclusions have interesting implications for instruction at the high school level. Selected schools experimented with the activity program for six years, after which time the experiment was evaluated.

In social performance factors, leadership, initiative, co-operation, activity school pupils displayed more practices than similar non-activity school pupils. In acquisition of knowledge and development of basic skills, it appeared that the activity program was equal to the conventional program. Activity program was superior to the conventional program in such objectives as critical reading, critical thinking, current affairs and civic beliefs, and in personal adaptability.¹¹¹

¹¹⁰Harl L. Douglass and Kenneth Pedersen, "An Experimental Evaluation of a Unit Procedure in Teaching American History," School Review, 44:362-371, p. 363.

¹¹¹Wayne J. Wrightstone, "Evaluation of the Experiment with the Activity Program in the New York City Elementary Schools," Journal of Educational Research, 38: 252-258, Dec., 1944.

Use And Efficacy Of The Unit Method

Although most authorities seem to think that the unit method is a very efficacious way of teaching, there are some who are critical of the method itself or the way it is utilized.

Bining and Bining thought highly of the unit approach.

In evaluating Dr. Morrison's procedure, one can easily see that he has utilized the best in modern educational practice and theory. The system may be far from perfect yet it does provide for individual differences, remedial procedures, a scientific system of testing which allows for follow-up work, the use of the sound method of supervised study under laboratory conditions, and, to some extent, socialized procedures.¹¹²

Johnson, on the other hand, is very critical. He thought that the Morrison method, with its mastery technique, relied too greatly on the old stimulus-response psychology and thus had outlived its usefulness.¹¹³

Miel and Brogan thought that the unit approach had great potential, but that some of the potential was lost by incompetent teachers who did not know how to use it properly.

¹¹²A. C. Bining and D. H. Bining, Teaching the Social in Secondary Schools, (New York: McGraw-Hill Book Co. Inc.), p. 170.

¹¹³Johnson, op. cit., p. 206.

On the one hand, faulty practices with respect to the unit idea have caused much loss of its potential for helping children with social learning. Children who might have been learning to think for themselves and to value knowledge for its usefulness have instead been going through rather meaningless motions. . . . For all its shortcomings as viewed in practice, the unit of work as a way of organizing elementary school social studies has more promise for democratic socialization than does the textbook. If the new tool were to be used properly, it could make a decided contribution to democratic discipline. . . . The unit method or organization has the potential flexibility and responsiveness to individual continuity in social learning. . . .¹¹⁴

Fogg was somewhat critical of the unit approach and its emphasis on activity. His objections to the activity program were as follows:

1. From the less control that is exercised by the teacher the more does learning become random and haphazard.
2. Activity program is too complicated to administer and is not economical for higher levels where the mastery of word symbols and other tools of learning makes activity less necessary and greater use of verbalism more direct.
3. Activity program emphasizes the development of the individual at the expense of the social being. What we need sorely is education for social living--adjustment not primarily to ourselves but to the people and things around us.
4. There is danger that the activity program which was intended as a means to an end may become the end itself.¹¹⁵

¹¹⁴Alice Miel and Peggy Brogan, More Than Social Studies, (Englewood Cliffs, N.J., Prentice-Hall Inc., 1957), pp. 118-119.

¹¹⁵Walter Fogg, "Project vs Subject: A Critical Review," School and Society, 51:276-278, March, 1940.

The unit method is not a panacea for all instructional difficulties. However, despite its shortcomings and misapplications, it has a very important place among the methods of instruction. It is one of the most refined and significant teaching techniques evolved for it includes means of psychologizing and socializing education in one and the same motion.¹¹⁶ However,

. . . it is only a refinement of past techniques; it is not a continuous educational development entirely unique. Schools should be ready to use any techniques which afford promise of desirable results.¹¹⁷

However, the unit method in itself is efficacious for it is based on sound psychological principles of learning. For instance, learning by wholes brings better results than learning by isolated, unrelated parts.

Numerous experiments have shown that material that possesses form and organization is much more rapidly learned and longer retained than is material which does not possess these characteristics. . . . Although facts and isolated bits of information are quickly forgotten, investigations have shown that broad principles and generalizations when developed by the learner show no deterioration or drop in retention.¹¹⁸

¹¹⁶J. C. Peel, "The Ubiquitous Unit," Phi Delta Kappan, 37:119-121, p. 120.

¹¹⁷Ibid., p. 121.

¹¹⁸Glen M. Blair, "The Psychological Interpretation of Teaching," Educational Administration and Supervision, 33:321-328, Oct., 1947.

The unit approach facilitates learning by the whole and thus is effective in achieving certain results.

An extremely important factor in learning is motivation. The more motivated a learner is, the more meaningful and purposeful is the learning to him. Blair stated that

While it is true that the degree of internal organization of material to be learned is in general highly positively correlated with rate and retention of learning, it must nevertheless be remembered that for the greatest effectiveness this organization must be in terms of the learner's purpose and the integration must be meaningful to him rather than to someone else.¹¹⁹

In this regard, unit teaching provides more fundamental purpose than any day-to-day teaching.¹²⁰ From the very beginning, every phase of the unit method theoretically represents co-operation between the teacher and the pupils to achieve goals set by the pupils and teacher. To Bossing, the emphasis on pupil motivation in the learning activity has been the most significant development in teaching methods for the past fifty years.¹²¹

The unit method emphasizes life-like situations based on pupil interest and needs. And what is mastered

¹¹⁹Ibid.

¹²⁰M. L. Goetting, Teaching in Secondary Schools, (New York: Prentice-Hall Inc., 1942), p. 232.

¹²¹Bossing, op. cit., p. 65.

. . . through life-like situations becomes an integrated element of the self or of personality to such an extent that all subsequent attitudes, judgments, and interests will be affected or modified thereby. . . . Through learning by doing, as well as by reading, they (the students) learn more effectively, more permanently, and more economically.¹²²

Learning is of value only to the extent that it functions in pupil development and results in modifications of pupil behavior and in adjustments to his surroundings. Mastery of units results in useful adjustment to the social environment because the learner acquired desirable attitudes, knowledge, and skills.¹²³

Further, the unit method approach is broad enough in scope to permit use of socialized recitation and group procedure, a means of giving socializing experiences to students.

Democracy is dependent upon the intelligent effectiveness of group action and reaction. The school must provide the necessary environment and teach youth the social skills to make democracy as a way of life work.¹²⁴

The use of the group procedure as part of the unit method helps provide the environment in which democratic attitudes and social skills are developed and democratic action is promoted.

¹²²Baldwin, op. cit., p. 61.

¹²³Ibid.

¹²⁴Bossing, op. cit., p. 171.

Through democratic group interaction pupils learn to understand each other and to respect each other's viewpoints. Group action plays a significant role in changing attitudes. Both Pratt¹²⁵ and Rath¹²⁶ held this view.

Potter stated that methods of instruction which aid pupils to plan co-operatively, to be tolerant of one another's viewpoint, and to carry out group projects,

. . . strengthen democracy, give the individual a sense of his importance in group activity, and enable him to be a better member of society. It serves as a bulwark against passive instruction and acceptance of dictatorship.¹²⁷

Group procedure, used within the scope and as part of the unit approach method, results in more advantages than just pupil co-operation. Working in a group, a pupil learns that good memory is not sufficient to solve a group problem. Basic skills such as reading, listening, writing, criticizing, discussing, are very necessary.¹²⁸ Further, members

¹²⁵John Pratt, "Who are the Leaders in Permissive Discussion?" School and Society, 73:279-282, May, 1951.

¹²⁶Louis Rath, "Improving Classroom Discussion," Educational Research Bulletin, 24:6-13, Jan., 1945.

¹²⁷Helen Potter, "The Co-operative Group Discussion," School and Society, 66:380-381, Nov., 1947.

¹²⁸J. D. McAulay, "Initiating the Group Method," Social Education, 21:313-315, Nov., 1957.

in a group learn to suspend judgment until all solutions are presented and analyzed. Then the best one is chosen. Group procedure then can be an example of inductive scientific thinking for the group moves through the steps of inductive procedure.¹²⁹

Memorizing of prescribed material fails to develop the critical thinking of the student and the proper development of a background of usable facts. Discussion is no substitute for teaching, but used effectively it can bring in new ideas and make reading more interesting and discriminating, can aid in the development of critical thinking and analysis of controversial issues, and provide opportunity for each pupil to give oral expression.¹³⁰

In addition, in several surveys taken pupils seemed to prefer methods and procedures which gave them opportunities to express themselves.

Doll found that pupils preferred democratic to either laissez-faire or autocratic procedures in the classroom.

¹²⁹Lois Dulley, "Discussion: A New Technique for the Classroom," English Journal, 36:412-419, Oct., 1947.

¹³⁰Edgar Dale and Louis Raths, "Discussion in the Secondary School," Educational Research Bulletin, 24: 1-6, Jan., 1945.

Teacher domination is disliked. Pupils wanted opportunities to express themselves.¹³¹

Sister Elvira learned that students thought that group discussion is a very interesting method. It made them feel a part of the class as they were given opportunities to voice their opinions, the material learned was better retained, and they were exposed to new views and opinions forcing them to change their attitudes and beliefs.¹³²

Rehage found that not only is there a more wholesome feeling in pupil-teacher planning and co-operation than in teacher-directed and teacher dominated procedures but that there was no difference in the results of learning subject matter. In pupil-teacher planning, however, the students showed more discrimination in the use of reasons to support solutions. Given the opportunity, students will use their critical and analytical powers.¹³³

¹³¹Ronald Doll, "High School Pupils' Attitudes Toward Teaching Procedures," School Review, 55:222-227, April, 1947.

¹³²Sister Mary Elvira, "Student Opinion on Methods of Teaching," Education Administration and Supervision, 32: 74-86, Feb., 1946.

¹³³Ken Rehage, "A Comparison of Pupil-Teacher Planning and Teacher-Directed Procedures in Eighth Grade Social Studies," Journal of Educational Research, 45:111-115, Oct., 1951.

Garrison very aptly summarized the purpose and value of group procedure when he stated that

The objective in the group process is to provide the ways and means (1) for the group to function effectively in providing individual experiences for pupil development in the personality factors involved and (2) for the group to carry on the procedure adapted to achieve the results sought.¹³⁴

Thus it would appear that the unit method of teaching is effective in meeting the present-day objectives of education and social studies. As a result units have become the most popular form of organization of the social studies.¹³⁵

They gain the interest of the child; they attempt to make his schooling real to him; they work for personal and social development as well as intellectual; they seek to avoid mere verbalization of knowledge, mere mechanization of the learning process, and too much addiction to the bookish, the academic, and the recidite side of education. Units seek to bring the school curriculum flexibility, zestful interest, pupil sharing in his own education, and student growth rather than student regimentation.¹³⁶

¹³⁴Noble Lee Garrison, "Changing Concepts in Methods of Teaching," *Elementary School Journal*, 52:197-206, Dec., 1951.

¹³⁵Wesley, op. cit., p. 485.

¹³⁶Peel, op. cit., pp. 119.

Schutte maintained that the unit method, well organized and intelligently executed, can be effective in a number of ways. Its success should appear in:

1. realization of intelligently formulated objectives;
2. a unified and organized concept rather than scattered or fragmentary knowledge;
3. increased motivation, interest, and vitalization toward better understanding and mastery;
4. greater ability of the student to sense when he has reached a fair degree of mastery; and
5. development of the pupil's ability to sense and discover for himself unsolved problems in the realm of the social studies.¹³⁷

¹³⁷T. H. Schutte, Teaching the Social Studies on the Secondary Level, (New York: Prentice-Hall Inc., 1942), p. 367.

IV. PROBLEM METHOD

Definition and Description

We are all faced with many varied problems in life. Kight and Mickelson defined a problem as a situation in which action is involved, in which the learner is the agent of action, and in which he has some difficulty or blocking in regard to the action.¹³⁸

To overcome the difficulty, the learner has to think, act, or behave in some manner. According to Gross and McDonald there is no common agreement on what is meant by 'problem-solving behavior'.¹³⁹ They stated that investigations showed that problem solvers used many methods which could roughly be grouped into three categories: trial and error behavior, sudden insights, and gradual analysis. In view of the diversity of the kinds of behavior they concluded that problem solving is a complex of many functions rather than some single unitary function.¹⁴⁰

¹³⁸Stanford S. Kight and J. M. Mickelson, "Problem vs Subject," Clearing House, 24:3-8, Sept., 1949.

¹³⁹Richard E. Gross and Frederick McDonald, "The Problem-Solving Approach," Phi Delta Kappan, 39:260.

¹⁴⁰Ibid.

Good defined the problem method as

. . . a method of instruction by which learning is stimulated by the creation of challenging situations that demand solution; a specific procedure by which a major problem is solved through the combined solutions of a number of smaller problems.¹⁴¹

Umstattd thought that problem method is an application of the unit idea because it embraced a continuous meaningful well-integrated activity beginning with a problematical situation and ending when the problem had been solved and the solution checked.¹⁴²

Problem solving, the procedure of the problem method, can be either deductive or inductive. Both methods involve generalizations. In the inductive procedure a new generalization is merely selected from the known generalizations.¹⁴³

The inductive procedure moves from the particular to the general. Generalizations are drawn from particulars, conclusions from facts, and hypotheses from an analysis of the problem. The steps involved in the inductive procedure are: recognition of problem, analysis of the situation and collection of data, analysis of data, setting up of possible hypotheses, and generalizations.¹⁴⁴

¹⁴¹Carter V. Good, Dictionary of Education, (New York: McGraw-Hill Book Co. Inc., 1945), p. 310.

¹⁴²J. G. Umstattd, Secondary School Teaching, (New York: Ginn and Co., 1953), p. 155.

¹⁴³M. L. Goetting, Teaching in Secondary Schools, (New York: Prentice-Hall Inc., 1942), p. 181.

¹⁴⁴Nelson L. Bossing, Teaching in Secondary Schools, (New York: Houghton Mifflin Co., 1952), pp. 115-116.

On the other hand, the deductive procedure moves from the general to the particular. Known conclusions and applications are applied to specific cases. The steps in the deductive procedure are: recognition of the problem, collection of information, review of principles and generalizations which may apply, formulation of the hypotheses, and verification.¹⁴⁵

Umstattd compared the two procedures in problem solving. The inductive procedure assembles data to organize it into a new generalization. The deductive procedure collects information to fit into a known principle. Both involve generalizations. The inductive generalization is a possible hypothesis whereas the deductive generalization is selected from proven principles. In the inductive procedure, if the principle is verified it becomes proven and established, but if the principle is verified in the deductive procedure it means that it covers the problem and that its use has been extended.¹⁴⁶

After surveying literature and investigations on the problem-solving process, Gross and McDonald concluded that

¹⁴⁵Ibid., pp. 113-114.

¹⁴⁶Umstattd, op. cit., pp. 156-157.

regardless of the procedure used there appeared to be three essential functions in the process: (1) an orienting function or information gathering; (2) an elaborative and analytical function or hypothesis formation; and (3) a critical function or hypothesis testing.¹⁴⁷

To Johnson, problem-solving was a method of inquiry, a fixing of belief. He diagrammed it as:

doubt \longrightarrow inquiry \longrightarrow belief¹⁴⁸

He stated that we think only when we have a problem or difficulty and only because we have doubts about what we are to do. Once there is doubt, inquiry, thinking, or problem-solving takes place and a belief is fixed.¹⁴⁹

There are five phases or stages in thought, reflection, or problem-solving: a state of doubt caused by a problem; tension, or blocked activity; the appearance of the problem; formulation of hypotheses; reasoning or mental testing of the hypotheses; and the selection of the most appropriate hypothesis.¹⁵⁰

¹⁴⁷Gross and McDonald, op. cit., p. 260.

¹⁴⁸Earl S. Johnson, Theory and Practice of the Social Studies, (New York: The Macmillan Co., 1956), p. 1953.

¹⁴⁹Ibid.

¹⁵⁰Ibid., p. 206.

Origin and Development

Historically, problem solving can be traced back to Descartes, Bacon, and Locke. However, for the purpose of this review only the more recent developments will be summarized.

Introduced into America, the Herbartian philosophy of education revolutionized methodology in that it rejected formal discipline and "faculty psychology" and condemned rote learning.¹⁵¹ Herbart

. . . conceived the mind as a unit and not a number of faculties. Although he recognized the potency of interest as a factor in the learning process and advocated the adaptation of instruction to fit the needs and capacities of the child, his greatest emphasis was placed on the teacher. . . . He believed that the education of the mind was wholly a matter of the presentation of proper education materials.¹⁵²

His five formal steps were an example of inductive procedure. In the first step, preparation, the student recognized the problem. The need to solve it was aroused. During presentation data was collected. In the third step, comparison and abstraction, data was analyzed and presented in significant relationships. In the generalizations step

¹⁵¹Arthur C. Bining and David H. Bining, Teaching in Social Studies in Secondary Schools, (New York: McGraw-Hill Book Co. Inc., 1952), p. 52.

¹⁵²Ibid.

there is careful and critical evaluation of data and a general conclusion or statement. In the final step, application, the students applied the knowledge to new situations.¹⁵³

Herbartian philosophy was an improvement over the "faculty psychology" of training because it emphasized the building up of an apperceptive mass rather than the strengthening of the mental faculties.¹⁵⁴ Yet it had serious shortcomings. Johnson was very critical. He thought that the Herbartian steps of learning were too fixed, too formal, and too elaborate and that there was too much emphasis on the teacher, who promoted activity without considering the interests of the students.¹⁵⁵

. . . Inquiry was not absent, but was chiefly determined by the teacher. . . . There was little genuine inquiry, that is, inquiry initiated and followed through by students in terms of their individual interests. There was also little if any recognition of students' attitudes. There was great concern with their knowledge and the 'facts' but little about how they might feel about them.¹⁵⁶

¹⁵³Bossing, op. cit., p. 117.

¹⁵⁴Bining and Bining, op. cit., p. 52.

¹⁵⁵Johnson, op. cit., pp. 203-204.

¹⁵⁶Ibid., p. 204.

Petersen evaluated the contributions of Thorndike's theory of learning to the problem-solving procedure. Thorndike emphasized the natural implications of learning in his S-R Bond theory. Problem-solving also depends upon the naturalistic approach. The fact that he emphasized that learning was a function of the mind strengthened the principles of problem solving method and put it on a firm psychological foundation. Thorndike stated that learning is human activity based on formation of bonds between stimulus and response and that it takes place best when satisfactory responses are made to stimuli. It is the degree of satisfaction that determines whether the responses will be continued or abandoned. This point is applicable to problem-solving in that hypotheses are tested and rejected until the soundest one is chosen.¹⁵⁷

Morrison's "teaching cycle" of five steps had three phases: stimulus, assimilation, and reaction. Under stimulus was step one, exploration, in which the apperceptive base was established and step two, presentation, in which the goals to be striven for were established. Under

¹⁵⁷L. L. Petersen, "The Historical Development of the Problem-Solving Method in Education," (Unpublished Doctoral Dissertation, The University of Southern California, 1951), pp. 177-183.

the second phase, assimilation, came activities which brought learning material to be assimilated. Under the third phase, reaction was step four, organization, in which students organized the materials learned, and step five, recitation, in which the pupils shared what they had learned.¹⁵⁸ In the phase reaction

. . . the class would organize the materials into a coherent whole and appraise it in terms of the new attitudes or meanings the materials studied now made necessary. This is a form of group thinking and group participation.¹⁵⁹

Because Morrison emphasized the mastery technique, Johnson thought that the Morrison method was committed too strongly to the S-R psychology.¹⁶⁰

Dewey perhaps had more influence on problem-solving procedures than any individual. A pragmatist, he believed

. . . that the best form of education is not a preparation for life--a process during which the pupil is stuffed with facts and information which might or might not come in handy at a later date--but is living at its best today.¹⁶¹

¹⁵⁸Johnson, op. cit., p. 205.

¹⁵⁹I. N. Thut and J. Raymond Gerberich, Foundations of Method for Secondary Schools, (New York: McGraw-Hill Book Co. Inc., 1949), p. 210.

¹⁶⁰Johnson, op. cit., p. 206.

¹⁶¹Thut and Gerberich, op. cit., p. 206.

Education was experience, and the primary objective of the school was to develop the ability to create better forms of living rather than to memorize and practise old habits and skills.¹⁶²

According to Dewey's philosophy, life produces continual problems. The ideal school would be one in which meaningful and relevant problems taken from experience challenge the student and force him to think. The school's task would be to educate the student in the method of solving problems.

Based on Dewey's analysis of reflective thought, the solving of a problem follows a fixed procedure. It involves defining the problem as to objectives, locating, selecting, and organizing information, evaluating the information or formulating hypotheses for solution of the problem, drawing conclusions or testing the hypotheses on bases of information and arriving at a conclusion and presenting it in some acceptable form.¹⁶³

¹⁶²Ibid., p. 205.

¹⁶³Frederick Marcham, "The Nature and Purpose of Critical Thinking in the Social Studies," Teaching Critical Thinking in Social Studies, Thirteenth Yearbook of the NCSS.

Philosophy Of The Problem Method

In its method and aims, the problem solving method is based on pragmatic philosophy.

Learning has been defined as changes in behavior that result from the persistent efforts of the learner to make adequate adjustment to an important problem situation. In fact, so central is this idea in the modern conception of learning that the problem solution has been considered the basic milieu of learning.¹⁶⁴

Problem-solving is based on newer concepts of what educational outcomes ought to be. Mastery of subject matter is no longer important. The important thing is giving pupils practice in the arts of living rather than an opportunity to commit to memory bodies of information.¹⁶⁵ The emphasis is on preparing people to live in a democratic society.

Effective living in a democratic society requires certain specific attitudinous skills of which the following are suggested as central: (1) the recognition of the dignity and worth of the individual; (2) concern for the welfare of others; (3) the skills of effective social participation; and (4) the use of trained critical thinking in the social problems with which one is confronted.¹⁶⁶

¹⁶⁴Bossing, op. cit., p. 102.

¹⁶⁵Charles C. Peters, "Teaching History and the Social Studies for Citizenship Training," Social Studies, 39:55, Feb., 1948.

¹⁶⁶S. P. McCutchen, "The Problem Approach in the Social Studies," Journal of Educational Sociology, 20:530-531, May, 1947.

Zafra also thought that preparing people to live in a democratic society was most important. He stated that the future of the human race depended upon the quality of critical thinking that was done by the individuals. "The individual needs an antidote to today's pressures of mass communication and to the tendencies toward uncritical conformity to the mores of the crowd."¹⁶⁷

It would appear that in a democracy it is of greatest importance that citizens have the ability to use techniques of critical thinking in dealing with social problems.¹⁶⁸ The kind of adults we will have will be dependent upon the students' ability to learn to think clearly and critically.¹⁶⁹

With its aim being to prepare pupils to participate intelligently and critically in democratic society, it is logical that the problem solving method is based on learning by doing. The pupil must be given experiences in

¹⁶⁷Carlos de Zafra Jr., "Teaching for Critical Thinking," The Clearing House, 31:453, April, 1957.

¹⁶⁸Howard C. Anderson, "An Experiment in Teaching Certain Skills of Critical Thinking," Journal of Educational Research, 38:241, Dec., 1944.

¹⁶⁹Don C. Cline, "Teaching Critical Thinking and Problem Solving in the Junior High School," California Journal of Secondary Education, 31:113-118, Feb., 1956.

solving of problems. He should be getting practice in those behaviors which make up his life so that he will be ready with tried out adjustments for making those behaviors most effective for good living.¹⁷⁰

Hurd thought that the problem method of learning was purposeful learning in that the emphasis is on matters of direct concern to the student. In addition,

. . . it gives the learner freedom to think. . . . Thus it is truly democratic in vision and insight. The philosophy is one of invitation to learning and release of intellectual abilities.¹⁷¹

This learning and release of intellectual abilities through problem solving comes from the experiences in which the whole child is involved in co-operation with others. The process of experiencing is the continual interaction between the learner and his environment.

If a child is to learn an idea, the idea must (before it can be learned) spring up in the child's mind as his response, his thinking response, to a situation with which he is confronted.¹⁷²

¹⁷⁰Peters, op. cit., p. 55.

¹⁷¹Archer Hurd, "What Do You Mean By The Unit-Problem-Project Plan of Instruction?" School and Society, 62:301.

¹⁷²W. M. Kilpatrick, "Philosophy of Education from the Experimentalist Outlook," Philosophies of Education, Forty-first Yearbook of the NSSE, Part II (Chicago: University of Chicago Press, 1942), p. 69.

Petersen summarized the philosophical assumptions on which the problem-solving method is based. They are:

1. That learning begins in experience and draws its premises from it.
2. That the approach to learning is naturalistic.
3. That there can be no discrete approach to learning.
4. That learning is a process which is at once dynamic and organismic.
5. That the sense data are the only means for acquiring knowledge.
6. That the mind is an instrument designed for adjustment and is unable to function apart from the biological organism.
7. That learning is doing and that doing begins with a problem and concludes with a tentative solution.
8. That solutions are warranted assertions.¹⁷³

Psychology Of Learning And The Problem Method

All schools of psychology agree that the behavior of learners in problem situations is directed, but they disagree in their explanations of the process.

Adherents of the associationist theory of learning think of problem-solving in terms of trial and error.

Placed in a strange situation the organism tries one reaction after another until the motivating situation is met or is withdrawn or until the organism becomes satisfied or indifferent or exhausted.¹⁷⁴

¹⁷³Petersen, op. cit., pp. 264-265.

¹⁷⁴William Brownell, "Problem-Solving," Psychology of Learning, Forty-first Yearbook of the NSSE, Part II, (Chicago: University of Chicago Press, 1942), p. 423.

Mental set is the director of behavior for it determines both what responses are made in the problem situation and what responses will be satisfying or annoying.¹⁷⁵

To the field theorists, problem solving is the recognition of insights into the relationships of parts of the whole problem.

The subject's cognitive structure of the problem situation is crucial. In the case of the true problem, the learner interprets the situation in some way and responds to the situation in the light of that interpretation. If the interpretation and the ensuing response are in error, the learner restructures the situation as many times as may be necessary.¹⁷⁶

Of the two schools, it is the field theorists who have given more attention to learning through conceptualization and problem solving.¹⁷⁷

Problem-solving method of learning is in keeping with basic psychological principles of learning.

Learning is effective when it is meaningful to the learner and when his interests and goals are the starting and directing points.

¹⁷⁵Ibid., p. 422.

¹⁷⁶Ibid., p. 424.

¹⁷⁷Maurice P. Hunt and Lawrence E. Metcalf, Teaching High School Social Studies, (New York: Harper & Brothers Publishers, 1955), p. 16.

One learns best to attain what he wants to know of or to be by driving straight at the aims. The inference here is that what one does while he is learning is what one does in putting that learning to the test afterward.¹⁷⁸

In the problems approach method of teaching, the problems have natural objectives. Students are able to see the significance and importance of securing the answer. And if the problem deals with a topic of particular interest to them it is that much more meaningful. It is very easy to focus problems on matters of concern to students.

Facts are learned more meaningfully and are retained longer if they are seen in significant patterns in relation to other facts.

In the problems approach there are many opportunities for the student to acquire true understandings in the sense that he perceives the relationship of ideas in question with other ideas and perceives as well the consequences to which action based upon the idea would lead.¹⁷⁹

Learning takes place through the interaction between the individual and his environment. The pupil is at the center of the learning process for it is he who adjusts to

¹⁷⁸Frank Butler, "Sociological Forces in Method," Journal of Educational Sociology, 13:423, March, 1940).

¹⁷⁹Dorothy W. Hamilton, "The Problems Approach," Social Education, 20:216, May, 1956.

the environment. Further, he is actively engaged in the learning process.

The problem method of teaching is based on these premises. First, the individual has continuous problems arising out of his environment which he must solve to advance in his adjustment. It is his thinking ability which helps him, and though the mind is the director of learning the whole individual responds for learning is an organismic process. Secondly, in problem solving the learner learns by doing. Not only does he absorb facts and information in his effort to seek a solution to the problem, but he also learns how to apply intelligence in a scientific manner. In other words, he learns the method of problem solving. Thirdly, in problem solving the learner is actively and personally involved.

Personal involvement is an essential condition in learning. The student will only expend the effort to learn and remember when he perceives the goal and feels it significant for him. We know from research in learning that this personal involvement factor in learning is necessary to produce changed attitudes and behavior.¹⁸⁰

¹⁸⁰Ibid.

Research Findings

A number of research studies have been conducted in the field of problem solving.

Gross and McDonald reviewed a number of such studies. They concluded that research did not definitely prove that realistic problems produced superior solutions and led to better problem solving. However, life-like problems seemed to be of greater value in aiding transfer of learning, in arousing interest, in changing attitudes, and in task involvement.¹⁸¹

To provide an answer to the question of whether the method or principle should be taught, they cited the information provided by Gorman's investigation.

1. Amount of information used in guiding problem-solving activity must be appropriate to the task set for the student.

2. Appropriate guidance is beneficial, but failure to provide it will delay rather than prevent solution.

3. Effectiveness of guidance does not depend solely on the amount of information imparted.

4. More explicit instruction may be just as effective as more directive guidance for the less able students. The less able students appear to profit little from knowledge of the principle of solution and tend to be more effective when method is available.¹⁸²

¹⁸¹Gross and McDonald, op. cit., p. 260.

¹⁸²B. Gorman, "The Effect of Varying Amounts and Kinds of Information as Guidance in Problem Solving," Psychological Monograph No. 431, Vol. 71, Cited by Richard Gross and Frederick McDonald, "The Problem-Solving Approach," Phi Delta Kappan, 39:261.

Research also seemed to indicate that in group problem solving there was more information available, more hypotheses were advanced for solution, and that there was greater opportunity for critical thinking than in individual problem solving. Further, students working in groups through problem solving approach gained as much in knowledge and improved much more in the critical thinking ability and attitudinal tendencies.¹⁸³ However,

. . . the group is not superior to individuals simply because it is a group, for within the group there are individuals who have better solutions, qualitatively, and in terms of speed of solution.¹⁸⁴

Other conclusions were that the problems approach increased student's ability to distinguish between fact and opinion, improved the critical thinking ability, but did not result in any appreciable decrease in acquisition of knowledge when compared with classes taught in the conventional manner. However, improvement in problem solving comes slowly.¹⁸⁵

Several educators and psychologists have experimented to see whether direct teaching of problem solving and critical thinking abilities is possible and whether the

¹⁸³Gross and McDonald, op. cit., p. 260-261.

¹⁸⁴Ibid., p. 261.

¹⁸⁵Ibid.

direct teaching improves the student's ability to utilize them.

Anderson discovered that practice in critical thinking problems developed skills associated with making inferences and drawing conclusions.¹⁸⁶

Hartung found that even students of low ability can make progress in critical thinking.¹⁸⁷

McKinnon and Burton stated that definite detailed instruction and practice in study techniques and problem solving improved the pupils' ability to use study techniques and solve problems.¹⁸⁸

Davis, Cleary and Meir concluded that ability to use skills does not transfer readily from one learning situation to another unless definite effort is made to teach for the transfer.

It would appear that one of the best ways to insure learning of problem solving skills is to provide educational experience in which the skills are used in many different situations of real concern and to review,

¹⁸⁶Anderson, op. cit.

¹⁸⁷Maurice Hartung, "Thoughts on Critical Thinking," Social Review, 56:315-319, June, 1948.

¹⁸⁸Nettie J. McKinnon and William H. Burton, "An Evaluation of Certain Study Procedures in History," Elementary School Journal, 40:371-379, Jan., 1940.

summarize, and eventually generalize the methods and skills into a pattern.¹⁸⁹

Salisbury conducted an experiment in which one group was given special training in outlining and summarizing while the control group was not. He concluded that the mental skills involved in outlining and summarizing transfer to produce improvement in thinking and reasoning ability. By giving directed practice in outlining and summarizing, a teacher could bring about definite improvement in thinking as shown in reading comprehension and reasoning.¹⁹⁰

Kottmeyer found that definite and well-organized activities in the field of critical reading stimulated the students and aided them. Furthermore, practice in critical reading appeared to produce students who thought objectively and critically.¹⁹¹

Elder concluded that students preferred the lecture method because the ideas were so neatly arranged for them that they had to do little critical thinking. However, too much emphasis on such an approach prevented the students from becoming thoughtful, critical, and analytical. He

¹⁸⁹Alice Davis, Florence Cleary, and Arnold Meier, "Problem Solving: Discussion Groups Aim at Action," Clearing House, 23:136-139, Nov., 1948.

¹⁹⁰R. Salisbury, "A Study of the Transfer Effects of Training in Logical Organization," Journal of Educational Research, 28:241-254, Dec., 1934.

¹⁹¹Wm. Kottmeyer, "Classroom Activities in Critical Reading," School Review, 52:557-564, Nov., 1944.

found that students using the problem method approach were more analytical and critical and were able to evaluate their fellow students more thoroughly. Furthermore, what they learned was retained for a long time.¹⁹²

Kight and Mickelson compared the effects of problem-centered and subject-centered units of instruction upon learning facts, learning rules of action, the ratio of rules of action learned to factual information, and connecting of specific facts with their corresponding rules of action. Twenty-nine teachers taught problem- and subject-centered units in rotation to 1450 students in English, science, and social studies classes. In problem-centered presentation the relationship of factual information to the necessary rules of action was the core around which the entire presentation was organized. Subject-centered presentation was concerned with teaching facts in their logical relationship to each other. Relationship between facts and rules of action was either ignored or incidentally touched upon.¹⁹³

¹⁹²Robert Elder, "An Experiment with the Problem Method in Social Science," Social Studies, 39:317-320, Nov., 1948.

¹⁹³Kight and Mickelson, op. cit., p. 3.

The results of the experiment showed that pupils both of low and high intelligence learned more rules of action with the problem type of presentation. Students also learned more factual information with problem-centered units but in some cases the difference was not statistically significant. In fact, social studies groups gained fewer facts than rules of action. In problem-centered units pupils made significantly more connections of specific rules of action with their corresponding facts, regardless of I.Q. level or subject area. When facts learned were compared with rules of action learned, students being taught by subject-matter centered units learned significantly more factual information than rules of action. With problem-centered units, there was no statistically significant difference.¹⁹⁴

On the basis of the findings of their experiment the investigators gave five recommendations for classroom instruction.

1. Make every effort to show pupils that problems stated in the instructional units are their own personal problems.
2. Make doing rather than knowing primary in the presentation.
3. Focus all factual information presented directly in the solution of the pupils' problems.

¹⁹⁴Ibid., p. 7.

4. State clearly and teach specifically the rules of action necessary in the solution of the pupils' problem.
5. Point out the factual information which serves as reasons for the rules of action taught.¹⁹⁵

Glaser conducted an experiment in which he sought to determine whether guidance in the principles and processes of problem solving increased ability in critical thinking. He compared four control groups which were given no guidance with four experimental groups which were. He concluded that the experimental classes made greater progress in developing critical thinking ability. The aspect of critical thinking which appeared to improve most was the students' attitude toward the use of the problem solving method. Students given the guidance were more disposed to consider problems in a thoughtful manner, proving the point that students' attitudes toward problem solving procedures can be changed. Although it appeared that the more intelligent students profitted most from the training in critical ability there were students in the low I.Q. rating who profitted as much. Furthermore, in group problem solving experiences students gained valuable socialization experiences and democratic skills.¹⁹⁶

¹⁹⁵Ibid.

¹⁹⁶E. M. Glaser, An Experiment in Development of Critical Thinking, (New York: Bureau of Publications, Teachers College, Columbia University, 1941).

The Stanford Social Education Investigation, a five year study involving ten teachers in five school systems, was designed to test the effectiveness of the chronological, topical, and problems method in social studies at the high school level.

Two senior groups of students matched in intelligence, socio-economic background and reading ability were taught by teachers using different approaches, the topical and the problem. It was concluded that the students using the problem-solving approach made more significant gains in more aspects of critical thinking and demonstrated superior ability, made significant growth in more work habits and study skills and demonstrated superior skill in the use of library and research techniques, made significant growth in knowledge and understanding and knew more about contemporary affairs, made more growth toward a liberal, consistent, and certain point of view, and showed more interest in a wider range of activities.¹⁹⁷

To compare the effectiveness of the problems approach and the chronological approach two groups of junior students matched as to intelligence, reading ability and socio-economic background were taught by teachers using

¹⁹⁷James Quillen and Lavone Hanna, Education for Social Competence, (New York: Scott, Foresman and Co., 1948), pp. 156-170.

the two different approaches. The relative superiority of the two approaches was not conclusive.

The students using the chronological approach made significant improvement in their ability to use research techniques but showed no great change in reading habits. They also made more growth in factual information about American history. On the other hand, students using the problems approach made more growth toward a liberal point of view and were more interested in school activities. During the year of study they increased their liking for school. Neither of the groups made any significant growth in critical thinking.¹⁹⁸

Quillen and Hanna concluded that

The overall superior growth which the students in the senior groups using the problems approach made in the behaviors evaluated, as compared with that of the students in the topical approach, and the growth made by the juniors using the problems approach in critical thinking, liberal attitudes, and academic interests warrant a more extensive use of the problems approach in social studies instruction and in general education.¹⁹⁹

Peters sought to determine whether problem-centered courses with teacher-pupil planning were more effective in developing citizenship than were the courses organized in

¹⁹⁸Ibid., pp. 170-176.

¹⁹⁹Ibid., p. 176.

the traditional manner. He concluded that education of the democratic action-centered type was equally or more effective in securing academic mastery. In addition, students taught by the experimental method could apply the knowledge acquired more effectively, showed greater interest in social problems, and exhibited greater competency in democratic behavior.²⁰⁰

Hudgins in studying the effects of group experience on individual problem solving concluded that members in a group solved more problems than individuals working alone but that group experience did not improve individual problem solving.²⁰¹

Broadhead and Dimond reviewed a number of studies on thinking and problem solving. They stated that Metcalf held the view that telling students which beliefs are true will

²⁰⁰Charles Peters, "Teaching History and the Social Studies for Citizenship Training," Social Studies, 39: 53-56, Feb., 1948.

²⁰¹Bryce Hudgins, "Effects of Group Experience on Individual Problem-Solving," Journal of Educational Psychology, 51:37-42, Feb., 1960.

not promote conceptual learning. In order for conceptual learning to occur the student must determine through problem solving what is true.²⁰² They also reported that Fersh found no conclusive evidence that the problems approach method, when compared with a traditional history course, resulted in a greater difference in social beliefs. However, there was a greater improvement in thinking skills among those using the problems approach.²⁰³

Use And Efficacy Of The Problems Approach Method

The problems approach method is being used more and more in social studies. Several factors are responsible.

First, and probably the most important, is experimental evidence. Research has shown that learning which takes place during problem solving, or as a result of problem solving, is more effective and more permanent than rote learning.

²⁰²Lawrence Metcalf, "A Theory of Conceptual Learning and Its Implications for the Teaching of the Social Studies for the Purpose of Clarifying Social Attitudes," (Doctoral Dissertation, Ohio State University Columbus, 1948), Cited by Russel Broadhead and Stan Dimond, "Social Studies," Review of Educational Research, 20:262, Oct., 1950.

²⁰³George Fersh, "An Evaluation of the Changes in Certain Social Beliefs, Social Values, and Thinking Skills Effected in College Students by a Social Studies Course Based on the Problems-Approach Method of Teaching," (Doctoral Dissertation, New York University, New York, 1949), Cited by Broadhead and Dimond, Ibid.

Secondly, there is a changing concept of educational outcomes. At one time mere mastery of facts and acquisition of knowledge was of prime importance. Facts were learned with the hope and intention that they might be used in the future. Now, the approach is more utilitarian. Facts are acquired because they are needed. In the problems approach method facts are the means of solving the problem, seldom the end.

Furthermore, with our society becoming more complex and changing as never before, more and more problems are arising. To solve these problems, mere acquisition of knowledge and facts will not be enough. One has to know how to apply and to utilize the knowledge one has gained. The problems approach method gives the students the opportunity to learn how to apply intelligence and knowledge scientifically to their problems and the problems of our society. The effective and enlightened citizen today is not the one who has learned what the problems of the past have been and how they were solved but rather the one who has learned how to gather information and how to solve new problems.²⁰⁴

Perhaps the greatest use of the problems approach method, and the area in which it is probably most

²⁰⁴Hurd, op. cit., p. 300.

efficacious, is in teaching the method itself and consequently in developing reflective thinking, for problem solving is development of reflective thinking. Bossing stated that in development of mental skills, concepts, attitudes, and ideals the problem is basic.²⁰⁵ McCutchen said that the problem approach to teaching social studies added materially to the pupils ability to develop critical thinking.²⁰⁶ Students who are repeatedly confronted with situations involving challenging problems learn how to solve problems with reflective thinking.²⁰⁷ And Gross and McDonald were most emphatic when they stated that schools by using the problems approach can improve the information gathering and hypothesis-forming abilities as well as develop critical-mindedness in testing the hypotheses.²⁰⁸

Not only does the problems approach method develop student ability in the scientific application of knowledge to social problems, but it also helps in developing other skills essential in the democracy. First, it gives practice to the students in organizing their thoughts in a

²⁰⁵ Bossing, op. cit., p. 133.

²⁰⁶ McCutchen, op. cit., p. 531.

²⁰⁷ Ernest Bayles, "Generalizations in Thinking," Educational Administration and Supervision, 18:438-449, Sept., 1932.

²⁰⁸ Gross and McDonald, op. cit., p. 262.

presentable fashion. Should a problem be solved through group discussion, students are given an opportunity to think quickly and critically in midst of discussion.²⁰⁹ Secondly, co-operative planning of a problem is a necessary part of the approach. Problem-solving then could be utilized in developing skills essential to group process work.²¹⁰ Thirdly, working individually on a problem, students have the opportunity to develop initiative and responsibility, two vital attributes of democratic citizens.

The problems approach method is valuable in developing the ability to generalize. Using facts to formulate and test generalizations has great merit in that the facts-generalization system helps pupils to acquire facts, to see their relationships, and to arrive at conclusions. Such a system increases pupil understanding. Three reasons have been advanced to support it.

1. Learning remains piecemeal unless pupils generalize from acquired facts.
2. Forgetting of facts is more rapid than forgetting of generalizations.
3. Having a generalization in mind contributes to acquisition of useful facts and provides the idea around which other learning can be acquired.²¹¹

²⁰⁹Elder, op. cit.

²¹⁰Hamilton, op. cit.

²¹¹Stanley Dimond, "The Role of Generalization in Teaching Social Studies," Social Studies, 22:232-234, May, 1958.

Broadly speaking, by developing students' ability in critical thinking, the problems approach method is helping to meet the demands of democracy. In today's world there are many conflicting views and opinions disseminated by mass media of communication. It is essential that the students be open-minded and reflective. They have to learn to clarify their values. If the whole child is to be educated, efforts should be made to help students learn to evaluate and to criticize.²¹² For until we have an intelligent citizenry trained in critical thinking, there will be few effective and intelligent solutions to any social problems. And critical-mindedness, the ability to judge the merit or quality of something, can be developed through the use of the problems approach method of teaching.²¹³

Hunt and Metcalf emphasized the value of the problems approach method of teaching in a democracy.

If conceptualization remains generally on a relatively thoughtless or uncritical level, we question the pertinence of such learning to the needs of a democratic society. It does not foster intellectual independence. . . . We would question whether democracy can survive for long if most youngsters gain their understanding of social issues in situations

²¹²Ira Freedman, "Developing Critical Mindedness," The Clearing House, 31:104-106, Oct., 1956.

²¹³McCutchen, op. cit., p. 536.

which lack problematic elements. Teaching in the social studies which ignores the use of felt problems as the motives of learning cannot but result in uncritical transmission of our cultural heritage with all this implies for intensification of conflict. Such teaching does not provide students with practice in, or understandings capable of, identifying and resolving contradictions among beliefs and attitudes.

We assume that learning which is achieved in problematic situations is commonly better understood, longer remembered, and more functional than insights which are adopted uncritically from authority. Further we assume that . . . the more keenly a problem is felt the better will be the quality of learning which results.²¹⁴

²¹⁴Maurice P. Hunt and Lawrence E. Metcalf, Teaching High School Social Studies, (New York: Harper & Brothers Publishers, 1955), p. 43.

CHAPTER V: SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This study analyzed critically three methods of teaching social studies to determine which one was most efficacious. The three were the lecture method, the unit method, and the problems approach method. To determine the efficacy, answers to the following four questions were sought:

1. Of what value are each of the methods in developing attitudes, in acquiring understandings, concepts, and facts, and in developing skills, abilities, and habits.
2. What are the basic psychological and philosophical principles and assumptions underlying each of the methods?
3. What are the distinguishing characteristics of each method, and are these characteristics responsible for the effectiveness of the method?
4. What evidence does research offer in support of the efficacy of each of the methods?

I. SUMMARY

Of What Value Are Each of the Methods in Developing Attitudes, in Acquiring Understandings, Concepts, and Facts, and In Developing Skills, Abilities, and Habits?

The lecture method is of some value in attaining all the objectives of social studies. However, its greatest value is in the teaching of factual knowledge when the main objective is to transmit facts.

The unit method has become the most popular form of organization in social studies. Its greatest value is in providing life-like socializing experiences in which

attitudes and social skills and abilities necessary for living in a democracy are developed. The emphasis is on changing the character and personality of the learner. However, acquisition of factual knowledge and understandings are not neglected. They are acquired as a result of active participation on the learner's part in a variety of experiences and activities.

The problems approach method is of greatest value in helping students learn to apply intelligence scientifically and to become critical, reflective, and analytical. Students acquire a method by which they learn how to gather information purposefully and how to solve new problems.

What Are The Basic Psychological and Philosophical Principles and Assumptions Underlying Each of the Methods?

The philosophy of the lecture method is the philosophy of the traditionalists whose view is that facts are the essence of an education and that the child is an empty receptacle into which knowledge and wisdom can be poured by one who is the authority. Teacher-centered and teacher-dominated, the lecture method is based on prescription and indoctrination.

The lecture method illustrates the psychological assumption that pupils learn and assimilate what teachers

tell them. This implies learning according to the associationist theory.

The unit method is based on pragmatic philosophy. Learning should provide for the all-round development and growth of the student. Learning is pupil-centered. He is at the beginning, center, and end of the learning process. The curriculum grows out of his needs and the needs of society. He learns by purposeful participation in activities and experiences. The teacher is a guide and not a taskmaster who indoctrinates.

The unit method is based on the Gestalt-field theory of learning which emphasizes learning by the whole rather than additive learning, which places a premium on pupil purposes and needs, and which accepts the fact that learning is primarily a process of experiencing.

In its aim and procedure, the problems approach method is based on pragmatic philosophy. The aim is to give pupils experience rather than information since learning begins in experience. Learning is the change in behavior as a result of the learner's efforts to adjust to a problem situation. Scientific method or inquiry is emphasized.

The psychology of learning on which the problems approach method is based is the Gestalt-field theory. The

learner is at the center of the learning process. He is actively engaged in a learning situation arising out of his needs. Further, learning takes place through the interaction between the individual and his environment. It is an organismic process. The unit method also facilitates learning by the whole, one of the prime concepts of the field theory psychology.

What Are the Distinguishing Characteristics of Each Method, and Are These Characteristics Responsible for The Effectiveness of the Method?

The main characteristic of the lecture method is its emphasis on transmission of information by an authority. Whenever the acquisition of facts is the major objective, then the lecture method is effective because it is time-saving.

The main characteristics of the unit method are its provisions for flexibility of procedures and individual differences and its emphasis on meaningful activity and socialization. With the unit method being somewhat eclectic in approach the teacher is able to use somewhat varied procedures thus accommodating students of different abilities. Furthermore, under the unit method approach every student can select activities appropriate to his interests and level of achievement. Learning under the

unit method is an active process. Students learn by doing, by participating in activities based on their needs. Further, there are ample provisions for socialization and the development of the social skills, habits, and abilities necessary for group and social participation. It is these characteristics that make the unit method what it is.

The main characteristic of the problems approach method is the emphasis on inquiry. Solving of problems is the natural way to learn. Further, it sharpens the learner's ability to think critically, to analyze, and to be reflective. Once the method is mastered, the learner is provided with a means to solve new problems. Facts may be forgotten, but seldom the procedure of inquiry.

What Evidence Does Research Offer in Support of the Efficacy of Each of the Methods?

Stovall's review of research on the lecture method indicated that there is little basis for its wholesale disapproval. It was of some value in meeting all the objectives of social studies, but it was particularly useful and effective in the acquisition of factual knowledge.¹ Dorsey and Stiles, after reviewing results of scientific

¹Thomas F. Stovall, "Lecture vs Discussion," Phi Delta Kappan, 39:255-258.

investigations into the usefulness of the lecture method of teaching, concluded that under the right conditions it has its place among methods of instruction and can be very useful.²

Experimental evidence on the unit method indicates that it is effective in the development of attitudes, study abilities, and other social performance factors. In the acquisition of knowledge, understandings, and concepts, the unit method approach was as effective as any of the other methods with which it was compared.

Research findings indicate that the problems approach method is a valuable method to use. Direct teaching and use of problem-solving improved the ability of the students to think critically, but did not result in any appreciable decrease in acquisition of knowledge. Further, in group problem solving experiences participants were able to gain valuable socialization experiences and democratic skills.

²Lindsey Stiles and Mattie Dorsey, Democratic Teaching in Secondary Schools, (Chicago: J. B. Lippincott Co., 1950), pp. 81-82.

II. CONCLUSIONS

Several conclusions may be drawn from this survey of professional literature on the three selected methods of teaching social studies. They are:

1. No one particular method is most efficacious in social studies instruction. Whereas a method may be very effective in attaining some objectives or kinds of learning, it may fail badly in others which may be just as important to the learner.

2. Of the methods examined, it would appear that the lecture method is most effective in the acquisition of information, the unit method in providing opportunities to develop democratic and socializing skills and habits, and the problems approach method in developing the scientific method of inquiry for social problems.

3. Method of teaching appears to be closely related to the aims of social studies and education and the philosophy of the teacher.

4. Fewer methods of teaching reflect the changes in theory of learning and in philosophy of education.

5. Of the three methods studied, the unit method, being somewhat eclectic in approach, has the most scope and flexibility in being able to provide for most types of learning.

III. IMPLICATIONS

1. With methods of teaching being so closely linked to objectives and aims of education and of social studies, it is of prime importance that a teacher be thoroughly familiar with many of them. Further, he should know what methods meet what objectives most economically and effectively. Only then will a teacher be able to select methods wisely and intelligently.

2. With modern democratic living being as complex and varied as it is, many skills and much knowledge is required. Since no one method can provide for all the skills and knowledge, it is logical and necessary that the social studies teacher not restrict himself to any one particular method, valuable as it may be.

3. A definite implication of this study is need for further research on methodology in social studies. Many of the experiments that were reviewed showed no convincing conclusions but merely indications as to possible superiority of a method. Additional experimental research may reveal more definite conclusions. Much work is still to be done in the field of attitudes. For example, the relative effectiveness of the three methods in changing attitudes could be more definitely ascertained.

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